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A COMPARISON OF TENDENCIES IN SECONDARY EDUCATION IN ENGLAND AND THE UNITED STATES

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CONTENTS

CHAPTER I

THE NEED OF A COMPREHENSIVE REORGANIZATION OF SECONDARY EDUCATION

RECENT EXPANSION IN THE SCOPE OF EDUCATION 1
Advancement of Secondary Education since 1900 2
THE INFLUENCE OF EDUCATIONAL EXPANSION UPON THE POPULAR ATTITUDE TOWARDS EDUCATION 2
Increased Demand for Education 2
THE NECESSITY OF EDUCATION IN A DEMOCRACY 3
THE EXPANSION OF THE ELEMENTARY SCHOOL CURRICULUM . . . 4
Elementary Education Inadequate for the Needs of Democracy . 5
ADOLESCENCE A CRITICAL PERIOD IN THE PUPIL'S EDUCATIONAL CAREER 5
CHANGES IN SOCIETY DEMAND A MORE EXTENSIVE SYSTEM OF EDUCATION 6
Requirements of the Individual 6
As a Citizen 6
As a Worker 6
As a Relatively Independent Personality 6
WORLD-WIDE PROBLEMS NOW FACE MODERN DEMOCRACY 7
THE MASSES ARE THEMSELVES THE RULERS OF TO-DAY 7
Democratic Principles Becoming Axiomatic 8
THE PERIOD OF COMPULSORY EDUCATION IS BEING LENGTHENED . . 8
In England 8
In the United States 9
School Authorities Extending Their Influence over Secondary Education 9
Labor and the Employment of Children 9
THE NECESSITY OF A COMPREHENSIVE REORGANIZATION OF SECONDARY EDUCATION 10
In the United States 10
In England 11
Changes in School Population 11
A NEW CONCEPTION OF EDUCATION 12
Place of Secondary Education in a Democracy 13

CHAPTER II

EDUCATIONAL ADMINISTRATION: FOR WHOM AND BY WHOM IS SECONDARY EDUCATION TO BE PROVIDED?

DEFINITIONS OF SECONDARY EDUCATION 14
In the United States 14
In England 14
Comparative Enrollments in Secondary Education 16

Differences in Practice Due to Differences in Conceptions of Secondary Education 16
Universal Secondary Education 17
Free Secondary Education 17
Public and Private Schools 17
Comprehensive and Type Schools 17
Differentiated Curriculums 17
Vocational Education 17
Educational Method 17
Educational Aims and Values 17
For Whom Secondary Education Is Provided 18
American Attitude Toward Universal Secondary Education . . . 18
Secondary Education Equally Open to All 19
English Attitude Towards Universal Secondary Education . . . 19
The Movement Toward a More Universal Type of Secondary Schools in England 20
England Provides Secondary Education for the Brightest Pupils 21
Debate in the House of Commons 22
The United States Attempts to Educate All 23
England Provides Secondary Education for Worthy Poor Pupils 23
Maintenance Grants 24
Comparisons Between English and American Practices 24
The United States Favors but England Neglects the Average Man 24
Certain English Writers Strongly Favor Universal Secondary Education 25
Times Educational Supplement 25
The Educational Ladder 25
Free Secondary Education in England and the United States . 27
In England Fees Are Charged 27
Reasons for the English Practice 27
Tendencies Towards Free Secondary Education 28
Debate in the House of Commons 29
Scholarships and Free Places 30
Continuation Schools 31
Workers' Education Association and Free Schools 32
Public and Private Schools 32
Coöperation between Public and Private Schools in England . . 32
Variety of Schools 33
Inefficient Private Schools 34
The American Attitude toward Private Schools 35
Central and Local Authorities 35
Variety and Liberty Watchwords in England 36
Local Initiative 37
Local Schemes 38
Inspection 38

Function of the Central Authorities 38
The Question of Local and Central Control in the United States . 39
Local Needs 39
Education is a National Concern 40

Comprehensive Versus Type Schools 41
In England Type Schools 41
In the United States Comprehensive Schools 42
Surveying Committees Favor Comprehensive Schools 43
Type Schools Impossible in Small Places 44

Articulation 45
Entrance to Secondary School at Age of Twelve 46
The Junior High School 46
The English Plan 46
Times Educational Supplement Plan 47
Age as the Basis of Admission 47
Admission to College by Mental Tests 48

Conclusions 50

CHAPTER III

ORGANIZATION OF THE PROGRAM OF STUDIES IN ENGLAND AND THE UNITED STATES

Democracy Demands Diversity and Unity 51

Qualities Desirable in a Democratic Society 52

Curriculum Organization in England 53
University Entrance Examinations 54
Controversies among the Subjects of Study 54
Specialization Postponed 56
Resolutions on Curriculum Organization 57
Vocational Specialization 58
Debate in the House of Commons 60
The Abolition of Sides 62
Limitation of the Number of Subjects 63
The Subjects of Study in England 64

Curriculum Organization in the United States 65
Early Manifestations of Differentiation 65
Extremes in Curriculum Organization 66
The Elective System 66
Controversies Among the Subjects of Study 66
Possible Subjects of Study 67
Differentiation by Groups of Studies 69
Differentiation by Groups of Pupils 70
The Specializing Function in Secondary Education 71
Vocational Specialization 71
Pupil Groups 73
Flexibility and Rigidity 74

CURRICULUM ORGANIZATION IN THE UNITED STATES—*Continued*
Educational Guidance 76
The Unifying Function in Secondary Education 77
Constants 78
Variables 79
Free Electives 79
Minimum Essentials 79
Unifying Studies 80
Recent Curriculum Controversies 81
Collectivism Versus Individualism 81

CONCLUSIONS 82

CHAPTER IV

VOCATIONAL EDUCATION IN SECONDARY SCHOOLS

WIDESPREAD VOCATIONAL EDUCATION EXPECTED BY SOME WRITERS . 83

OPPOSING FORCES IN THE MATTER OF VOCATIONAL EDUCATION . . 85

FACTS THAT FAVOR VOCATIONAL EDUCATION 86
Smith-Hughes Act 86
Certain Associations Favor Vocational Education 86
Commission on the Reorganization of Secondary Education . . 88
First Interpretation 88
Second Interpretation 90
Vocational Education to Attract Pupils to the Secondary Schools . 90
Vocational Education and the Pupils' Best Development 91

JOHN DEWEY ON VOCATIONAL EDUCATION 93

OTHER PROGRESSIVES ON VOCATIONAL EDUCATION 97
Flexner 97
Eliot 98
Snedden 98
E. C. Moore 99
W. R. Smith 99
Kilpatrick and Others 100

STATISTICS 101

THE REAL ISSUE IN VOCATIONAL EDUCATION 102
Shall Vocational Education Be Given at All 102
To What Extent Should It Be Given 102
On These Two Questions Opinion Varies 103

ONLY EXTREME CASES SHOW A STRONG VOCATIONAL TENDENCY . . . 106
Vocational Education Not Intended for All 107
Possibilities of a Caste System in Secondary Education 107

SECONDARY EDUCATION SHOULD BE BOTH CULTURAL AND PRACTICAL . . 109

ENGLISH AND AMERICAN PRACTICES COMPARED 111

CHAPTER V

THE BASIS FOR THE SELECTION OF CONTENT IN THE MODERN PROGRAM OF STUDIES

COMPREHENSION OF THE MODERN WORLD AS AN AIM 114
RECENT CONTROVERSIES HARMONIZED 117
West and Flexner 117
West and H. G. Wells 118
SOCIAL STUDIES BECOMING PROMINENT 119
In the United States 120
Modern Studies in England 122
Foreign Languages in the United States 124
THE CONTENT OF THE COURSE IN SCIENCE 124
In England 124
In the United States 126
THE CONTENT OF THE COURSE IN MANUAL TRAINING 127
In England 127
In the United States 127
THE CONTENT OF THE COURSE IN HOME ECONOMICS 128
CLASSICS NOT COMPLETELY SOCIALIZED 128
CERTAIN PHASES OF EDUCATIONAL METHOD DEMAND SOCIALIZED SUBJECT MATTER 129
Mental Discipline 129
Interest and Effort 132
COMPARISONS 133

CHAPTER VI

EDUCATIONAL METHOD

THE FUNCTION OF EDUCATIONAL METHOD IN A DEMOCRATIC SCHOOL SYSTEM 134
EDUCATIONAL METHOD IN AN AUTOCRACY CONTRASTED WITH EDUCATIONAL METHOD IN A DEMOCRACY 135
Obedience to a merely External Authority 135
Intelligent Self-direction 136
Conflicting Purposes of Subject Matter and Method 136
ENGLISH AND GERMAN PRACTICES COMPARED 137
PRESENT TENDENCIES IN EDUCATIONAL METHOD IN ENGLAND . . . 139
Liberty 139
Social Life 140
PRESENT TENDENCIES IN THE UNITED STATES 140
Changes in Outer Action and Inner Dispositions 140
Whole-hearted Purposeful Activity 143
Contrasted with Reverence and Obedience 143
Living Worthily in School as a Preparation for Living Worthily afterwards 144
Opposition to this Line of Argument 145

Attempts to Place Educational Method on a Democratic Basis . 146
The Project Method 146
Purposing, Planning, Executing and Judging 147
The Purposeful Act and Interest and Effort 149
Interest and Effort Mutually Complementary 150
Working with Pupils' Native Interests 152
The Purposeful Act and Discipline 153
Concomitant Values 155

CHAPTER VII

the meaning of secondary education in a democracy

A Comprehensive Theory of Secondary Education in the Making . 157
Building a Worthy Civilization as an Aim 158
A New Conception of Humanism 159
Social Participation as an Aim 161
Art for Art's Sake 163
Growth as an Aim 166
Activity Leading to Further Activity 167
Secondary Neurone Connections 168
Formal Discipline 169
Activity Leading to Further Activity and Culture 171
Meaning of Culture in a Democracy 172
Total Social Efficiency 174
Conclusions 175
Bibliography 177

A COMPARISON OF TENDENCIES IN SECONDARY EDUCATION IN ENGLAND AND THE UNITED STATES

CHAPTER I

THE NEED OF A COMPREHENSIVE REORGANIZATION OF SECONDARY EDUCATION

The education of the adolescent is the most pressing educational problem of the twentieth century in all civilized countries, but more especially in those under democratic rule. It is the purpose of this investigation to enter into a consideration of the present tendencies and problems of secondary education; and since England and the United States are the world's leading democracies the investigation will be confined to the systems of secondary education in these countries. A democratic system of education is the demand of the present in both countries. "The problems of the two countries are not identical, but the hopes and aspirations for the future of democracy are the same in both." [203, August 1, 1918, p. 321.][1]

Recent Expansion in the Scope of Education

The problems of elementary education to a large extent occupied the attention of educators in the nineteenth century, and during that century the battle for compulsory elementary education was fought and won. This movement progressed more slowly in England than in the United States, gaining headway there after 1870, but by the end of the century both nations were committed to the policy that the welfare both of the individual and of society was dependent upon the retention of pupils in school till the age of thirteen or fourteen. While the elementary school was in process of development little thought was given to the establishment of a system of publicly supported secondary

[1] The first number in the reference notes refers to the corresponding number in the bibliography at the end of the investigation; the last number refers to the page number of the reference.

schools. This was especially true in England. Even until 1900 scarcely any one in England had considered secondary education a matter of national concern. [160, 72.] Just before this date the Bryce Commission had made its famous report, which showed an astonishing inadequacy in the provision of secondary education, and—in 1902—a law was passed permitting the establishment of secondary schools at public expense. Prior to that time England depended altogether upon private schools, higher grade and higher elementary schools, for secondary education; but since then there has been a remarkable increase in the number of secondary schools in England. At that time, the supply of secondary education had made a greater advance in the United States than in England, and since then there has been an increase in high school enrolment of several hundred per cent. All of this shows a need for a more extensive provision of secondary education and of types better suited to the needs of the pupils.

The Influence of Educational Expansion upon the Popular Attitude towards Education

The expansion of the scope and extent of education that has taken place in the last few decades has had a widespread influence on the popular attitude towards education of all kinds. It has developed a faith on the part of leaders generally in the efficacy of education to solve all kinds of social and economic problems. The political scientists, the sociologists, and the reformers resort to it as a prevention and cure for all kinds of social evils. There is a greater desire to-day for the masses to be educated than ever before. Social and political thinkers no longer consider it good policy to keep the masses ignorant, and a little of education has in turn created a demand for more and still more education on the part of the masses. This is true both of England and the United States. Dewey has described the American situation as follows [58, 14][1]: "I sometimes think that the necessity of education is the only settled article in the shifting and confused social and moral creed of America." There certainly seems to be a clear and definite feeling in the United States that ignorance is the great enemy of mankind and education the great liberator.

[1] Compare this with a quotation from "Nature" in *School and Society*, Vol. 4, p. 600.

England is also looking to her schools as she never did before, if the recent Education Act is any indication. Mr. Fisher, president of the Board of Education, is quoted as having said that "the welfare of the nation depends upon its schools" [15, 10] and the writer who quoted this [15, 11] states that "the aim of her education must be both high and wide, higher than lucre, wider than the nation," and adds the suggestion that "education like finance, should be planned on international lines by international consensus with a view to world peace." [15, 11.] The fact that during the recent war the school has been subjected to much criticism after reverses and just as highly praised after successes is an indication of the faith in education at the present time.

The Necessity of Education in a Democracy

From the beginning of the United States as a nation it has been recognized that education is essential to the success of a democratic government and to meet the needs of democracy has been cited as the aim which should control the development of democratic school systems. The same point has been more and more apparent in England as democratic tendencies have developed there. It was thought at first that the ability to read and write universally disseminated would go far toward satisfying, would perhaps be sufficient for, the needs of democracy. The recognition of the vastness of the problem has increased so much faster than the educational facilities for dealing with it that the educational situation seems even more critical to-day than it did a hundred years ago.

In the present educational situation three features seem to stand out prominently. These are as follows:

1. The elementary school has expanded to such an extent that it cannot be expected to attempt much more than it attempts at present.

2. Elementary education is not sufficient for a high type of citizenship in a modern democracy. Therefore, the possibilities for the future lie in the education of the adolescent.

3. In order that the secondary school may be enabled to carry its part of the educational burden it must undergo a comprehensive reorganization.

These topics will be discussed in order.

The Expansion of the Elementary School Curriculum

During the nineteenth century the enrichment of the elementary school curriculum was the dominant policy of the elementary school. At first its work was confined to primary essentials, but as the school year was lengthened and the number of years of compulsory attendance increased it began to attempt more than the mere essentials of reading, writing and arithmetic. The old subjects were expanded and new subjects added. Grammar was expanded through "language lessons" into composition and literature. [149, 58.] "Object lessons" were added and became the forerunner of elementary science and nature study, including physiology and hygiene. [149, 58–59.] Geography as a "description of the earth's surface" with its study of locations and boundaries, has given place to the study of geography as the "home of man," emphasizing the social, civic, industrial, and commercial aspects of life. History has had a similar expansion. Civics as a separate subject and practical arts are comparatively recent additions. So many subjects have been added that it is not uncommon for a pupil in the elementary school to have ten or twelve studies at the same time. [100a, editorial; also 152, 48.]

To this extent the elementary school has grown within the last century both in England and the United States. From such considerations it would seem that the elementary pupil is already expected to carry as much work as his capacity and the time devoted to elementary education as at present organized will permit. Even this the elementary school people do not consider sufficient for citizenship in a modern democracy. Consequently, they have seriously proposed that the school day should be eight hours in length, the week six days instead of five, and the school building in use the year around, because they realize that the formal education of many pupils will come to an end with the close of the compulsory school period, and they wish to make the best possible use of this period.

One persistent question arises out of this situation: Is the kind and amount of education that the elementary school is giving, or could give, even with this extensive reorganization, sufficient to meet the needs of democracy? For example, is the knowledge that a pupil gains from the study of the kind of elementary science that is given in the elementary school, from nature study, physi-

ology and hygiene, as much as a citizen of a modern democracy needs to know that he may live a healthy life and adequately fulfill his duties and obligations as a citizen? Is it as much as a free man should have the privilege of knowing even from the standpoint of appreciation and insight into modern development? Second, does the knowledge of geography as the home of man that an eighth grade pupil may normally be expected to have acquired give a sufficient understanding of modern industry, modern science, and modern complex social conditions? And third, in our present complicated international relationships with the emphasis on the significance of peoples as contrasted with governments, are history and civics as taught in the first eight years of school sufficient for the duties of citizenship? In other words, is the period of elementary education long enough for a pupil to acquire in the way of skills, appreciations, culture, manners and morals, all that a citizen of a democracy should possess?

The answer to these questions is in the negative both in England and in the United States. For it is becoming more and more apparent that an elementary education is not enough for citizenship and a life career, that a higher type of education more universally distributed than has ever been known before is necessary if democracy is to succeed. [15, ix–x and 10.] By improving teachers, by rationalizing methods, by eliminating useless subject matter here and there, by a general expansion all along the line, the elementary school may be made to perform more adequately what it now attempts, but that it will ever be able to meet all the needs of democracy is improbable, however well it may be reorganized.

Adolescence a Critical Period in the Pupil's Educational Career

For these reasons it was stated earlier that the most pressing educational problem of the twentieth century is the training of adolescents. The advancing demands of citizenship make the mere possession of the right to vote appear inadequate. The education that citizenship requires is not merely a training in civics but a broad and sympathetic appreciation of modern industrial, economic and social conditions, as well as a training in morals and manners, and in individual intelligence. A democracy cannot afford to abandon its potential citizens at a most critical

age to such exploitation, but should keep them under supervision till the beginning of adulthood.

The English attitude on this question is shown in the following quotation [15, 196]: "A system which compels a child to attend school until he is fourteen and then leaves him to his own resources can do little to create, and less to satisfy, a thirst for knowledge. During the most critical part of his life—fourteen to eighteen—he is left without guidance, without discipline, without ideals, often without even the desire of remembering or using the little he knows. He is led, as it were, to the threshold of the temple but the fast closed door forbids him to enter and behold the glories of the interior. Year by year there is an appalling waste of good human material: and thousands of those whom nature intended to be captains of industry are relegated in consequence of undeveloped or imperfectly trained capacity, to the ranks, or become hewers of wood and drawers of water. Many drift with other groups of human wastage to the unemployed, thence to the unemployable, and so to the gutter and the grave."

Changes in Society Demand a More Extensive System of Education

In addition to the reasons already given why a more extensive education is urgently needed in the future, certain changes in society during the past few decades have profoundly affected the activities of the individual and demand corresponding changes in his educational opportunities. The Commission on the Reorganization of Secondary Education of the National Education Association mentions three dominant changes in society that make such changes in educational opportunities imperative [42, 7]: "As a citizen, he must to a greater extent and in a more direct way cope with problems of community life, State and National Governments, and international relationships. As a worker, he must adjust himself to a more complex economic order. As a relatively independent personality, he has more leisure."

The Commission expresses the opinion that "the problems arising from these three dominant phases of life are closely interrelated and call for a degree of intelligence and efficiency on the part of every citizen that cannot be secured through elementary education alone, or even through secondary education unless the scope of that education is broadened." [42, 7.]

World-Wide Problems Now Face Modern Democracies

Dewey, writing just before 1900, felt justified in making the statement that "the industrial change overshadows and controls all others." [57, 5 and 42, 7.] He describes the various educational problems devolving upon the school as a result of this industrial change. [46, Chapter I.] Since then educators have been trying to adapt educational opportunities to changing conditions, but they have scarcely begun to learn how to deal with the many social problems due to the industrial change, to say nothing of those other problems of citizenship and leisure mentioned by the Commission on the Reorganization of Secondary Education, when all those other problems arising as a result of the war were added, so that now the political change with all its problems seems temporarily at least to have overshadowed all others, even the industrial. Great new republics and even more radical types of governments have been formed. Alliances among groups of nations and the "balance of power" have given way to a League of Nations. All problems have become world-wide. "World politics," "international relationships," "universal brotherhood of man," "League of Nations," "industry and commerce have become international," etc., are words in everybody's vocabulary and as was stated above (p. 3) it has been proposed that education should like finance become international.

The Masses Are Themselves the Rulers of To-Day

What is still more to the point, so far as it concerns a need for more education than the elementary school can give, is the fact that never before has the burden of solving these international problems rested so completely upon the shoulders of the people themselves. [61, 13 and 17. Also 203, January 9, 1919, p. 17; and 163, 7.] The masses are themselves the rulers more than ever before both in the United States and in England, and it is necessary for any nation to educate its rulers. Especially is this true of a democracy. In the past the tendency has been to neglect the average man, "yet it is the vote of this numerous but obscure type that puts governments in office and turns them out again. . . . Knowledge and experience of the rapidly changing world cannot be picked up on street corners. Men must be specially educated to meet the new conditions." [51, 448.] So

long as the nations were governed by a few rulers, the amount of education given to the masses may have been considered satisfactory. The more favored pupils continued their education ten or twelve years beyond the elementary school period and hitherto these favored few became the leaders. The ideal of democracy is, however, that all citizens share in the conduct of government. Under present conditions a great many of these cannot remain in school beyond the age of fifteen or sixteen, and if this ideal is to be attained it is incumbent on the school to offer every inducement possible, even in some cases to offering financial assistance, in order to retain them in school as long as possible, and to extend its supervision wherever it can to those who have left school. For this purpose England has established a system of maintenance grants, a more extensive discussion of which will be given in a later chapter.

From these statements it seems that democracy is really coming into its own, and its principles becoming axiomatic the world over, —a democracy not only of rights and privileges but also of duties and responsibilities. The individualism of the nineteenth century, an individualism that demanded rights without the corresponding responsibilities, is breaking down. [164, 227. Also 163, 421.] When it is agreed that rights are accompanied by responsibilities, a more extensive demand than hitherto is made upon education, if we are to go forward and not backward. It is of course possible that a backward step may be taken. Things cannot be as they were before the war, and the lack of continued growth means disintegration.

The Period of Compulsory Education Is Being Lengthened

For the above given reasons the compulsory attendance period is being lengthened in various ways. In England the compulsory age has already been raised beyond fourteen. All pupils leaving the elementary school at the age of fourteen must either attend the continuation school for eight hours a week till the age of sixteen and ultimately till eighteen, or, in lieu of this, they must attend a full time school till the age of sixteen. In the United States there has been no law so sweeping as this, but compulsory attendance beyond the age of fourteen is not unknown in this country, and the Commission on the Reorganization of Secondary Education strongly recommends [42, 30] that "a sound national policy

dictates the urgent need for legislation whereby all young persons, whether employed or not, shall be required to attend school not less than eight hours in each week that schools are in session until they reach the age of 18." At present, however, the United States is depending more upon public opinion and the adjustment of the curriculums to keep students in high school and in this respect, as comparative enrolments will show, it has been successful beyond all other nations. Society is gradually realizing in its own interests the importance of extending the period of compulsory education and of supervision over adolescents.

There are many educators who confidently look forward to the time when secondary schools will be as widely established as elementary schools are now. At the same time the necessity of readapting and readjusting the school to meet varied needs, abilities, and capacities of the increasing members in attendance is recognized. It seems scarcely to be doubted that all that is being done with continuation schools; coöperative part-time of the Fitchburg, Massachusetts, and Cincinnatti, Ohio, plans; the differentiation of curriculums; all that is being done through extension agents; and such proposals that the State establish "vestibule" and "upgrade" schools in the industrial and commercial concerns themselves in order that the education of the young workers may not cease when they leave the ordinary public school, [189, 751–758]—with all these movements under way, it cannot be doubted that we are learning more and more about the education of young people and that we shall eventually be justified in requiring compulsory schooling of some kind of all children, or at least oversight over them, till the age of eighteen or later. [198, 577. Also 42, 29–31.]

It seems, therefore, that the school authorities are gradually extending their influence over the secondary school period as they have extended it over the elementary school period. This is true both in England and the United States, but in England this tendency has developed to such a remarkable extent that all questions of juvenile delinquency and crime are now dealt with by the school authorities. To deal with juvenile misdeeds is thought to be more the function of education than of the courts; therefore, "The administration of the Employment of Children Act, 1903, the Prevention of Cruelty to Children Act, 1904, and the Children's

Act, 1908, is now entrusted to the education authorities." [208, 1918, p. 72.]

Another indication that the extension of the compulsory attendance age may be expected in the future is the attitude of Labor towards the employment of children under sixteen. A report from the Conference of Labor which met in Paris states:[1] "Two important features of the American and British Labor program were accepted today by the Commission on International Labor Legislation and will form a part of the whole project of international regulation which will be submitted to the full peace conference. These are the prohibition of child labor under sixteen years of age and the uniformity of seamans' wages." It is only a step beyond this to universal compulsory attendance of some kind till the age of sixteen. How the extension of educational opportunities may be made so that both individual freedom and social welfare may each be properly safe-guarded is an important question of secondary education to which democratic countries must give careful attention in the future.

The Necessity of a Comprehensive Reorganization of Secondary Education

The evidence is strong that if the ideals of democracy are to be realized, a comprehensive reorganization of secondary education is imperative at the present time. Educational aims and procedure will have to change radically to meet the new conditions of life that are springing up everywhere. "The present program of public education," says J. F. Bobbitt (17, Preface), "were mainly formulated during the simpler conditions of the nineteenth century. In detail it has improved. In fundamentals it is not greatly different. A program never designed for the present day has been inherited. Any inherited system, good for its time, when held to after its day, hampers social progress. It is not enough that the system, fundamentally unchanged in plan and purpose, be improved in detail. . . . To do the nineteenth century task better than it was then done is not necessarily to do the twentieth century task."

To retain a system "fundamentally unchanged in plan and purpose" was exactly what the educators tended to do in the past,

[1] An Associated Press dispatch from Paris, February 19, 1919.

when they proposed that some of the high school subjects be begun in the seventh and eighth grades. This policy has never worked satisfactorily, and, consequently, a comprehensive reorganization is now taking place in the United States in the form of the 6–3–3 plan. England is developing a similar though not an identical plan, what may be called a 6–4–2 plan.[1]

A system "fundamentally unchanged in plan and purpose" would likewise be retained if the secondary school program as it has been organized in the past, with the aims and methods that have prevailed, should be thrust upon all adolescents. If this should be done an injustice would probably be inflicted upon a great many of them. Some boys and girls would doubtless not only be happier and better contented if allowed to enter some kind of employment, but certain of these would in probability actually learn more and in every respect be better developed for life services. Some kind of provision could be made for such cases in a comprehensive reorganization, perhaps both by part-time schooling and by maintaining oversight over adolescents while in employment.

Changes in the school population, therefore, also demand a reorganization of secondary education. In the United States it is felt that democracy demands an equal right for each child to receive that education which will best develop his capacities. The situation is aptly summed up by the Commission on the Reorganization of Secondary Schools. [42, 8.] It is stated that the growth of democracy has brought into the secondary school "a large number of pupils of widely varying social heredity, capacities, aptitudes, and destinies in life. Further, the broadening of the scope of secondary education has brought to the school many pupils who do not expect to complete the full course but will leave at various stages of advancement. The needs of these pupils cannot be neglected, nor can we expect in the near future that all pupils will be able to complete the secondary school as full-time students." The kind of education hitherto offered is unsuited to great numbers of these people, and, consequently, before an extension of education with advantage to all concerned can take place, the whole scheme of secondary education must be reorganized and expanded.

[1] The last two years of the English plan, however, resembles the junior college in the United States more than the senior high school.

In England, it is felt that, due to their great losses during the war, talent must be sought and developed wherever it may be found. The *Times Educational Supplement* has repeatedly emphasized the point that each child should receive an "outfit for life." It should be said that "outfit for life" does not mean simply vocational ability but ability in every sphere of life in which a citizen engages. It is not to be expected that the kind of education that was designed for conditions that existed prior to the war would be suitable for new conditions and a different class of pupils. For in England it is certain that the schools will draw pupils more widely than hitherto. Even during the period of the war the lower classes which had never been able to send their children to the secondary school found themselves prosperous, owing to increased wages, and began to send their children to the secondary schools in great numbers.

The Commission on the Reorganization of Secondary Education [42, 8–9] mentions certain changes in educational theory, such as the questions of individual differences in capacities and aptitudes, of formal discipline, the importance of applying knowledge, the continuity of the development of children, as further evidence of a need for a comprehensive reorganization of secondary education. A growing conception of the importance of these questions makes radical changes in secondary education imperative.

A New Conception of Education

From the preceding discussion it is obvious that we are moving away from the old conception of what makes up education. We are departing from the old ideal of culture and the humanities, but having broken away from the old moorings it is not certain whither we are headed. There seems to be no concerted opinion as to what the character of education is going to be. In attempting to build a new ideal there are many conflicting opinions and divergent forces. There is a possibility that the ideal may be broader and better suited to the needs of democracy, but there is a danger that it may become narrowly specific and vocational, and hence destructive of the best interests not only of democracy but of a full and complete life. It is sure, however, to be broader in the scope of its offerings and the extent of its distribution, but it may not be of better quality. The old ideal, however well

adapted to a few students, was not suited to the needs of many. Hence individual aptitudes and individual differences are now taken into consideration as never before. This attempt to fit education to the needs of the individual pupil brings in its wake all those questions of differentiation, not only of types of schools, but also of curriculums within each school.

One result of the war has been to raise the question as to the place of secondary education in a democracy. The following quotation seems to be an answer to which both England and the United States could agree. "It was education of the wrong sort that produced the war, it is education of the right sort that can prove the only permanent guarantee of a lasting peace." [142, March 20, 1919.] What constitutes this right sort of education? In other words, what is the nature of secondary education in a democracy? These questions and all others to which they give rise must be faced if democracy is to endure. These questions constitute the problem of this investigation.

There will be four main divisions of the investigation. These divisions are:

A. Educational Administration, or for whom and by whom is secondary education to be provided?

B. The Curriculum, or the nature of secondary education in a democracy.

C. Educational Method.

D. The Meaning of Secondary Education in a Democracy.

The main underlying question, What should be the nature of education in a democracy? will continue throughout.

CHAPTER II

EDUCATIONAL ADMINISTRATION: FOR WHOM AND BY WHOM IS SECONDARY EDUCATION TO BE PROVIDED?

Definitions of Secondary Education in England and the United States

It is very misleading to make comparisons between the English and American systems of secondary education without clearly defining just what the respective nations mean by the term. In the United States there is little confusion as to what is meant by the term, although there is much as to what should be the nature of secondary education. Secondary education in the United States is that period of education which follows and is superimposed upon the elementary school, thus defining the field of secondary education to a large extent according to the normal period of the pupil's life during which he is in school. Up to quite recently the secondary school period covered the years from fourteen to eighteen, but more recently, on account of the proposed extension of the duration of secondary education to six years, it may cover the period from twelve to eighteen. Anything that is taught in this period is considered secondary education.

It is not so easy to determine just what is meant in England by secondary education, for it is defined more in accordance with the purpose of the school and the content of its program of studies than by the period during which the pupil is in school. Within the period from twelve to eighteen several kinds of educational opportunities are offered that the English do not consider a part of secondary education. There are, for instance, three divisions of elementary education that come within this period. Just as in America there are the last two years of the elementary school proper, since the elementary school continues to fourteen years of age. There were also in certain places until quite recently higher elementary schools, now replaced by central schools, designed to give a more advanced education than the elementary school but nevertheless not classed as secondary schools. These schools

carry their pupils up to fifteen or even sixteen, and teach such subjects as history, geography, English, science, mathematics, domestic science, a foreign language, and commercial subjects. With such a curriculum these schools would certainly be considered a part of secondary education in the United States, but are not so considered in England. A third division consists of the continuation schools, provision for which has already been enacted into law, but which are only in the process of organization. Compulsory attendance at these schools is already required of all up to the age of sixteen and will eventually be required of all up to eighteen who do not attend an accredited school full-time up to the age of sixteen. The character of the work done in these schools up to the age of sixteen is not vocational but general. After sixteen, vocational preparation may become prominent, but will not completely dominate the work of these schools. Although these three types of schools constitute an important part of the education of adolescents, they nevertheless are not considered by the English as a part of secondary education.

There are also a number of junior technical schools and junior commercial schools, schools in which technical, commercial, or general vocational work is the main feature. These are confined, as might be expected, to the large cities. Comparable to these is a certain type of rural schools for the agricultural areas. All of these extend from twelve to sixteen, but they are not a part of secondary education in the English sense, because it is not considered "the function of the secondary schools to provide vocational and professional preparation." [208, June, 1918, p. 68.]

Secondary education as conceived by the Englishman is given in none of these schools, but in still another type of school. These are the schools, first, which are commonly called the Great Public Schools, such as Eton, Harrow, and Rugby; second, other schools which have had a shorter history and are not so well known as the Great Public Schools but which are built upon the same general plan and have the same general purposes as these; and third, the recently established secondary schools built as a result of the Act of 1902 because with the growing population the older types of schools were not sufficient for all adolescents who desired a secondary education. These three types of schools are the kind that the Englishman has in mind when he speaks of secondary education. They give what may be called a general

liberal education. The Board of Education defines a secondary school as one which "offers to each of its pupils a progressive course of instruction . . . in subjects necessary to a good general education, upon lines suitable for pupils of an age range as wide as from twelve to seventeen." [94, p. 253.] The curriculum of these schools, according to the Regulations of 1918, is composed of English, languages other than English, history and geography, science and mathematics, art and manual training. A secondary school in the English sense is a school in which such subjects are taught.

It is obviously very misleading, therefore, to make comparisons between the two systems of secondary education unless this distinction in definitions is kept clearly in mind. As an instance of how misleading it may be we may take the simple question of the number of students enrolled in the secondary schools of the two countries. America boasts its million and a half high school students while England has scarcely two hundred thousand, a ratio of 8 to 1, while the ratio of population is only 5 to 2. The English statistics do not, however, include those in attendance at the special types of schools, as the junior technical, junior commercial, central, etc., the continuation schools, or those attending hundreds of private schools of which no statistics are available. It is evident that a comparison without taking these facts into consideration does not tell the whole story. In order that there may be no confusion on account of this difference in the use of terms, a comparison will be made between adolescent education in England and the United States, respectively. Adolescence will be defined as extending from twelve to eighteen years of age.

Differences in Practice Due to Differences in Conceptions of Secondary Education

If the American definition be accepted one must be prepared to accept untold variety, not to say confusion, in the readjustment that must follow, while if the English definition be accepted one may expect educational procedure more nearly to follow traditional lines, and this is exactly the case.

The energetic debates that have centered round the value of the classics and the sciences in English schools during the past four years are but a storm in a teacup compared with the unrest in American secondary education. In England the questions are confined almost wholly to the relative values of certain subjects; in general the conception of a liberal education

remains fundamentally the same. The problems in the United States, however, include the reconstruction of the whole system of education, the revision of the meaning and purpose of liberal education and the readaptation of the curriculum and methods of instruction. [203, November 14, 1918, p. 492.]

More specifically, the definitions of secondary education in the two countries foreshadow certain differences in educational practice and in administrative policy:

1. If the English definition be accepted, the brightest pupils will be carefully selected for the secondary schools, others attending one of the other types of schools. According to the American conception all pupils between the ages of twelve and eighteen will be encouraged to attend the "cosmopolitan high school." (See below, pp. 41 ff.)

2. Also in England fees will be charged, while in the United States secondary education will be free.

3. In England both public and private schools will be fostered, while in America public schools will predominate.

4. If the English definition be accepted, a variety of types of schools will almost inevitably be the administrative policy. If the American definition be adopted cosmopolitan or comprehensive schools will be the rule.

5. In the internal organization of the school there will be less need for differentiated curriculums in the English schools than in the American cosmopolitan schools.

6. The question of vocational training in secondary schools may not even exist in England; at least it will be *less acute* than in America.

7. Whereas, if the principle of universal free secondary education be accepted, a recasting of the fundamental principles of educational method will become necessary.

8. The whole conception of educational aims, liberal education, culture, and the meaning of secondary education in a democracy will have to be modified.

The first four of these differences will be treated in this chapter. The others will be deferred to later chapters. In addition in this chapter, the tendency toward a national system of education will be taken up. It will be found that England has progressed much farther toward a national system than America, and has more nearly harmonized local with centralized control.

For Whom Secondary Education Is Provided in England and the United States

The most fundamental difference between English and American systems of secondary education is undoubtedly that of universal free secondary education. This is the foundation-stone of the whole system of American secondary education, in its every phase. On nothing is there such complete accord. Despite the frequent charge of materialism against the educational system of the United States, it can safely be said that even the economic appeal is "a very bad second to the more genuinely national ideal—to give every child, rich or poor, an equipment that will make him a better citizen, better able to cope with the problems that confront him today." [203, October 31, 1918, p. 465.] In England, on the other hand, the policy of selecting the brightest to attend the secondary school has been the rule and continues under the new Act. Universal free secondary education has at least for the time being been shelved.

The American Attitude Toward Universal Secondary Education. The attitude of the American people toward universal secondary education is correctly reflected in the following quotation:

> It [the secondary school] is a school for "all the children of all the people," —the most democratic school which can be conceived because it has a place for the rich and for the poor; for pupils who can be educated mainly through books; for those who can be educated mainly through people; for those who can be educated mainly through contact with things, things as they are apprehended in science or things as they are apprehended by constructive activity with the hands; it has a place for the dull and retarded pupils and for the brightest and accelerant pupils; and it has a place for pupils who expect to continue their education in higher schools and for those who expect to leave school at the earliest possible moment. [82, 380–81.]

One of the articles of faith of the *School Review*, one of the most influential magazines on secondary education in the United States, is expressed as follows [193, 67]: "It is the duty of each state to supply secondary education to every boy and girl in the state," and the Commission on the Reorganization of Secondary Education holds a similar view. "This Commission holds that education should be so reorganized that every normal boy and girl will be encouraged to remain in school to the age of 18, on full time if possible, otherwise on part time." [42, 30.]

The Commission on the Reorganization of Secondary Education does not even make the requirement of complete preparation for entrance to secondary schools before admission is granted. "We recommend," it says, "that secondary schools admit, and provide suitable instruction for, all pupils who are in any respect so mature that they would derive more benefit from the secondary school than from the elementary school." [42, 19.] This probably means that in most cases pupils should be admitted to high school on the basis of age rather than attainments. The same recommendation is incorporated in the *Portland Survey* [48, 217–19] and has to an extent been practised by some American superintendents. This is, however, not yet the common practice, but it is almost unanimously accepted that secondary education should be open to all who are properly prepared. A very definite attempt is made from year to year to enroll and retain in high school every one who passes through the elementary school. The measure of success is very far from perfect, but the situation is improving, as is indicated by the following figures, which show that the secondary school population is increasing three times as rapidly as the total population: "The number of pupils has increased, according to federal returns, from one for every 210 of the total population in 1889–90, to one for every 121 in 1899–1900; to one for every 89 in 1909–10, to one for every 73 of the estimated total population in 1914–15. . . . About one-third of the pupils who enter the first year of the elementary school reach the four-year high school, and about one in nine is graduated." [42, 8.]

It is correct to say that the American high school is equally open to all but not equally accessible to all, that there is freedom of entrance but that not all pupils take advantage of this opportunity. In some states provision is made for the transportation of pupils who do not live near a secondary school into areas where there are such schools, tuition being also paid by the state or districts.

The English Attitude Toward Secondary Education. There has been no such attempt in England to make secondary education universal, and unfortunately no statistics as to the enrolment of adolescents in the various types of schools are available. During the war it was estimated that no kind of formal education was reaching 2,000,000 youth, but prospects for a large increase in

educational opportunities for adolescents in England is very good at present. During the war the working classes prospered and began to send their children to the secondary schools in increasing numbers. A great many secondary schools are being established. Manchester, for instance, has an extensive building program under way. As soon as the continuation schools come into complete operation with their broad curriculum and compulsory attendance, the number of adolescents reached will probably surpass in actual numbers the secondary school enrolment in the United States.

In England those who do not enter the secondary school either continue in the elementary school (there is as much as five years overlapping between the elementary and secondary schools) and after that the continuation schools, or at the age of twelve enter other types of schools, junior technical, junior commercial, central, etc. This raises the question of the extent to which class distinctions permeate the secondary school system of England. In the past England along with other European countries has maintained a system of fee-paying secondary schools for those who could afford it and alongside of it a system of free elementary schools for the masses. This enables those who are in good financial circumstances to attend the secondary school while those who are not must attend the elementary school. This division in a large number of cases has extended all the way down to the beginning of school life, as "the sons of professional men and the aristocracy never or seldom attend public elementary schools but receive their preliminary education in private preparatory schools." [167, 255.]

The Movement Toward a More Universal Type of Secondary Schools in England

There is a growing tendency away from this class system, for in the first place "there has arisen during the last fifteen years a large and increasing number of secondary schools which receive practically all their pupils from the elementary schools [43, 83]; and in the second place by the act of 1902 free places to the number of 25 per cent of the previous year's enrolment and a smaller number of competitive open scholarships are available. In this way the intellectual élite of the working and lower middle classes gain access to the secondary schools. In the third place, the quite

appreciable growth in the number of secondary schools increases the number of free places to elementary school pupils, and it is Mr. Fisher's plan to increase still further the number of free places by a still more extensive increase in the number of secondary schools. In the fourth place, there is an agitation led by the *Times Educational Supplement* for one type of school up to the age of eleven for elementary school pupils and on top of this a compulsory secondary school for all up to the age of fifteen. In the fifth place the establishment of a universal system of continuation schools forms a possible basis for the development of a universal type of free secondary schools of the American type. The present situation will be taken up first and following this possibilities for the future will be considered.

England Provides Secondary Education for the Brightest Pupils

In England sentiment is growing for opportunities for full-time secondary education for all pupils, but this is not the present practice and there is considerable opposition to the adoption of such a policy. At present the English, to be sure, do try to provide secondary education for the brightest pupils whether rich or poor who might profit by secondary education. They do this by means of scholarships, by providing free places, and even by maintenance grants in worthy cases. "In worthy cases" would imply, however, that there are some pupils who are not worthy and could not, therefore, profit by secondary education, hence, a selection of the brightest must be made.

The following quotations show the attitude of certain classes of educational thinkers: "What needs insisting on here is that there must be enough of these secondary schools to receive all of whatever class who have the ability to make good use of an extended course of education. These should be chosen out from the elementary school." [8, 19.]

The President of the Board of Education, Mr. Fisher, likewise implies a doubt whether some pupils can profit by secondary education. He says: "I submit we should desire a secondary education for all boys and girls in this country who are capable of profiting by it." [73, 17; cf. 198–577.] A writer in the *School World* expresses the following desire: "I should like to see the secondary schools purged from the curse of paying dullness and

such an increase in the number of scholarships and maintenance allowances as would secure that every child of ability should have the best education possible." [173, June, 1916, p. 266.]

Lord Bryce gives his opinion as follows: "The next problem is how to find the finest minds among the children of the country and bring them by adequate training to the highest efficiency. The sifting out of these best minds is a matter of educational organization and machinery." [15, p. x.] In another place he says: "For the schools the problem is how to discover among the boys and girls those who have the kind of gift which makes it worth while to take them out of the mass and give them due facilities for pursuing these studies at the higher secondary schools." [32, 556.]

The same view was prominent while the recent bill was in committee in the House of Commons. [203, May 9, 1918, p. 193.] The following is a typical attitude:

> MR. WHITEHOUSE moved to omit from the opening portion of clause 1 —"With the view to the establishment of a national system of public secondary education available for all persons capable of profiting thereby" —the words "capable of profiting thereby."
>
> MR. R. MACDONALD suggested that the words to which exception was taken were open to objection because they gave a hint of vocational education—that was to say, that at a certain stage in an elementary school career some authority should decide that one boy should become a workman and another boy should be prepared for a university career—and of the regional idea of education—that was, that a boy born in a seaport should go to sea, and that a boy born in a rural district should become an agricultural worker.
>
> SIR PHILIP MAGNUS contended that the honorable member read into the words which it was proposed to omit a meaning which neither the President of the Board of Education nor any other member of the House contemplated. The words were of importance as explaining the real purpose of the Bill. It seemed useless to give education to persons who were incapable of profiting thereby.

The mere fact that the words "capable of profiting thereby" are used predetermines the policy of selection. An American observer would be inclined to sympathize with the position taken by Mr. MacDonald, for it seems that there is a danger of dividing society into intellectual classes, if the policy of selection be adhered to, and it is the American wish to reduce this possibility to a minimum. It should be remembered, however, that the debaters are here using *secondary education* in the English sense defined at the be-

ginning of this chapter. This point of view is not so dissimilar from the American as it at first seems, for in the United States it is realized that all pupils cannot profit by the traditional type of secondary education.

There is a difference between the two countries, however. In the statement, "It seemed useless to give education to persons who were incapable of profiting thereby," as reasonable as it appears, seems to carry with it a grave possibility of shifting the responsibility from the school to the child. At least there seems to be an attitude of "take it or leave it," a policy which the best American educators have discarded as undemocratic. It does not make sufficient provision for individual differences. It seems to take for granted that the secondary school is not to be adapted to the pupil but the pupil to the school, and if anyone cannot profit by the kind of instruction given he should go elsewhere, or drop out. Of course it should be said that American practice has not yet reached this ideal.

The United States Attempts to Educate All

The American attitude is quite different. Here there is freedom of entrance and an attempt to provide intellectual equipment for any who wish to enter. The responsibility is put squarely upon the school. The assumption is made that any normal child may be improved by a suitable kind of education, and this holds true for all children who are not positively feebleminded. If the pupil does not improve by the kind of instruction the high school is giving, then, so the typical American educator would say, the child should not be driven away on that account. The school must learn to educate that child or admit failure to that extent. The burden of proof is put on the school, not on the child.

England Provides Secondary Education for Worthy Poor Pupils

It seems, therefore, that England still lags behind in providing opportunities for all, yet it is probable that she surpasses the United States in her provision for the education of poor children. For a part of clause 4 of the Fisher Act in regard to local schemes reads as follows: "In schemes under this Act adequate provision should be made in order to secure that children and young persons shall not be debarred from receiving benefits of education through

inability to pay fees." [203, June 6, 1918, p. 229.] Thus by law poverty does not deprive a pupil of secondary education. It is, therefore, probable that England has a system in which any ambitious child, however poor, may push his way to the top. However, England gives opportunities only for those who may profit by secondary education. In America, on the other hand, by publicity, by encouragement, and by a very rich offering of courses, an attempt is made to attract every child possible but nowhere are maintenance grants offered for the very poor. Consequently, a number who really might profit by secondary education in the United States cannot do so on account of poverty, or must work their way through school under a great handicap.

In one respect, therefore, the American system is more democratic than the English. In the United States entrance to the secondary schools is free to all adolescents adequately prepared, and tuition is free to all who enter. In England, on the other hand, entrance is possible only to those who secure free places, or scholarships, or are willing to pay fees. In one respect, on the other hand, England is more democratic than the United States, for the poor are given maintenance grants while in America they are given no assistance; but the spirit and custom of working one's way through is a commendable feature of American education while the fear of being considered objects of charity has been known to drive pupils away.

An important test of a free secondary school system is, of course, the length of school life and the extent to which advantage is taken of the opportunities offered. Elimination for one cause or another has been very great in the United States. It is, therefore, "at least an open question whether an extended system of scholarships and free places with maintenance allowances is not more genuinely in the interest of society than the free school—provided, of course, that the system is so administered that the boy or girl who matures late is not cut off from adequate opportunities." [203, November 14, 1918, p. 492.]

The United States Favors But England Neglects the Average Man

This discussion leads to another fundamental difference between the English and American systems of secondary education. The English concentrate their efforts "far too much on high academic

distinction for the few and neglect the average man." [51, 447.][1] In the United States it has been frequently said that the bright pupil is neglected, that compared with what he might have accomplished he is the most retarded pupil in school. The average and mediocre talent is said to receive most emphasis in America. Compare, for instance, the English idea of selecting the brightest pupils to go on to the secondary school with the opinion of the Commission on the Reorganization of Secondary Education, which insists that every child shall go to the secondary school when he is old enough regardless of the grade he has reached in the elementary school.

Certain English Writers Strongly Favor Universal Secondary Education

In considering the possibilities for the future in England there seems to be a strong sentiment away from the present system. Early in the war the *Times Educational Supplement* and others repudiated the doctrine of the ladder of Huxley by which it was expected that a child of ability could ascend from the lowest to the highest station in life. They boldly advocated a "liberal education for all." [203, October 26, 1916, 185.] They repudiated this doctrine because there was implicit in it the idea of classes. The brightest could be expected to get to the top, while the dull would remain near the bottom with varying degrees of individual advancement between. This is, of course, the same as providing for the bright and neglecting the dull as described above. When it was realized during the war that England was losing a great many of her best minds on the battlefields some of the English educators began to cast around for another metaphor to fit the new needs. They realized that not a single child should be wasted. Talent should be developed wherever it could be found, and not only talent but "all those who show promise." [8, 19.] To remedy the matter "broad staircase" was first offered, but this did not satisfy, "for staircase, too, though suggesting something less narrow and less difficult of ascent than a ladder, is an unfortunate metaphor implying as it does escape from a lower class to a height from which the climber can look down on his old associates as doing a lower kind of work—let us change the metaphor, and demand a broad highroad of education open to all who have the

[1] See also 203, September 26, 1918, p. 411; and 167, 256.

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brains to profit by following it, rather than, as at present, to few who have the means to pay the cost." [8, 20.]

This still does not get away from the policy of selecting those who can profit by an existing system of secondary education, thus fitting the child to the system rather than fitting the system to the child. Another writer, however, states that the ideal should be to carry "the whole mass of the people forward even though it be but a little way." [197, 511.]

This attitude is somewhat less conservative than the one previously referred to, but it is still not so radical as the opinions of the *Times Educational Supplement:* "In these columns (for three years) we have expressed the view that secondary education for all is the goal to aim at. When this view was enunciated in these pages, it was met first with derision, then with doubt, and then almost suddenly accepted, with the example of America striking the imagination of our rather cautious thinkers as an article of faith. . . . It is time to be done with educational shams and injustices which offer to one child an 'elementary education,' to another with perhaps less native ability 'secondary education.' " [203, January 9, 1919.]

Still later the *Times Educational Supplement* says: "For our own part we have no sympathy with the imposition of the old system of elementary education on a new world, and we hope that some local authority will have the courage to break definitely with the past and offer preparatory education up to eleven years, and then secondary education for all up to the new age limit. . . . If we read the signs of the times aright this will not be tolerated much longer, and the Board will come to revise . . . its determination to preserve a separate and incomprehensible system of finance." [203, March 20, 1919, p. 139.]

This theory has not yet been put into practice, as we have seen, and it is probable that the *Times Educational Supplement* is somewhat optimistic in its expectation of an immediate change to a new system, but there are indications that England is working in this direction. Mr. Fisher is sympathetic with the policy but seems to think it impossible at present, and the Act of 1918 has at least postponed the establishment of a system of universal secondary schools.

Free Secondary Education in England and the United States

Inextricably linked up with universal opportunities for secondary education is the question of free secondary education. In England there has been a custom ever since the Renaissance of charging fees for secondary education [203, July 25, 1918, p. 315] and even free public elementary schools did not become accessible to all until 1891. [*Ibid.*, p. 315.] Fee-paying elementary schools did not disappear, however, with the establishment of free elementary schools. The *Times Educational Supplement* estimates [*Ibid.*, p. 315] that there are 180,000 children in attendance at fee-paying elementary schools to-day.

Some English parents seem to have an aversion to free schools. This may be due in part to an old prejudice which has held over from the time when free schools were considered charity schools, or in part to personal, social, and denominational reasons. Happily the denominational question is not giving so much trouble as formerly, but educational observers have noticed the lack of the democratic spirit in the English schools observable in the common schools of the United States. Thus Sandiford states: "The son of a parent in the upper middle classes is never by any chance found sitting cheek by jowl with the laborer's son on the benches of the public elementary school." [168, 202.]

This seems to an American observer the result of pure snobbishness, but a writer in the *Times Educational Supplement* asserts that fee-paying schools are not the outcome of snobbishness as commonly supposed, but "rather the last vestige of parental choice and control in the national schools." He states that "a national system of education levels up but it also levels down. It does not and will not for many years do for all children as much as every wise parent wishes to do for his own. It kills all other schools of similar type, and, as it can itself supply not what is best but only what is for the moment politically possible, it prevents many parents from giving their children as good an education as they desire. The true policy is to retain and encourage fees while insisting that they shall be used, not to relieve the taxpayer but to improve education. . . . Why should parents who are willing to pay for classes of 35 or 40 be compelled to send their children to classes of 50 or 60 and thus sacrifice at least 30 per cent of the possible result?" [203, August 1, 1918, p. 328.]

The American educator would not accept the statement that public schools are less efficient than the private schools. While he would not state that the free public school always supplies what is best, he would assert that the public school does supply what is as good as any other type of school affords and usually better.

The *Times Educational Supplement* gives another reason why the English parent shows a greater willingness to pay fees for the education of his children than the American parent. "From the earliest times," it says, "it was regarded as a parental duty to contribute to the maintenance of the teacher and his school. This sense of personal responsibility for local education became implicit in the race. . . . So deeply was the idea ingrained that, when education became compulsory, the idea of free education was never entertained, and quite poor parents paid fees as a matter of course." [*Ibid.*, p. 315.]

The excuse for the perpetuation of fee-paying schools is that they are an excellent alternative to inferior private schools, "and there are still a number of parents who are not only willing but anxious, on personal, social, and denominational grounds, to use schools that are not entirely rate-supported. . . . They are a bulwark against private schools of the baser sort." [*Ibid.*, p. 315.]

The *Times Educational Supplement* cites the United States as an instance of the failure of free education to develop the school-going habit: "In the United States of America it was assumed years ago that it was impossible to introduce compulsion in education until the schools are made free. So the reverse process to that followed here was adopted, and with the worst possible results, as the history of the Chicago elementary schools shows. From 1818 a stern battle was fought in the State of Illinois for free schools, and the goal was achieved in 1855. The free schools did not fill and the school-going habit was never acquired as it was acquired under the fee system in England. After another long struggle compulsory education was introduced in 1883, but the Act was unenforceable, and attendance is still most unsatisfactory. The school-going habit, as a part of the social outlook of the poorer people, has never been acquired in the United States." [*Ibid.*, p. 315.]

There are many evidences, however, to show that the English are moving toward American, free, differentiated, democratic

secondary education, open to all. The *Times Educational Supplement*, in the editorial quoted above, states that the "broad tendency of our time is certainly towards free education for all, but society is not ready for the abolition of all doors." It supports this statement as follows: "The action of the Sheffield Authorities in providing a system of free secondary education is a sign of the times. It is clear that we are rapidly reverting to the medieval conception of education as a spiritual thing which must be as freely provided as the religious needs of the spirit." [203, February 21, 1919.]

Perhaps the British attitude cannot be given better than by a quotation from the proceedings of Parliament while the Fisher Bill was in Committee [203, May 9, 1918, pp. 193–94]:

MR. KING moved an amendment directing the county council, or the borough council, as the local education authority, to provide in its scheme, "Secondary or higher education in free publicly-controlled and publicly-managed schools available for all persons desirous of such education."

MR. WHITEHOUSE supported the amendment.

MR. FISHER said that, in common with all educationalists, he sympathized with the ideal put forward in the amendment, and he reminded the Committee that at present no fewer than 67 per cent of the children in State-aided secondary schools had received free education in the free elementary schools. As a practical question, he doubted whether the best way of putting the object in view would be to insist on abolishing all fees taken in secondary schools forthwith, which would mean a loss of revenue to the State of 1,000,000 pounds, and suggested that the better way would be to encourage local education authorities to provide more secondary schools, and as a natural consequence to provide free places in those schools, with a view to impressing on local education authorities their responsibility in this matter. He was prepared to insert a new sub-clause in Clause 4, to the effect that a local education authority in preparing schemes shall as far as practicable provide means whereby children and young persons shall not be debarred by poverty from the benefits of higher education. He thought that would meet the point.

MR. KING said that it did not meet the point at all. He wanted the parent, the rate-payer, to have the right of demanding secondary school training.

MAJOR F. WOOD said, Was it not the fact now, that the rate-payer or parents, if they were very keen upon secondary education, would bring pressure to bear upon their elected representatives in order to get secondary education? The fact was—and they might as well be frank about it—whatever might be their ideals there was no public demand for universal

secondary education, and those who brought forward the present amendment did not represent the normal average lay opinion outside the House.

Mr. Goldstone said the W. E. A. (Workers' Education Association) was in favour of something much more advanced than was contained in the Bill. That body had passed a resolution demanding that the Bill be amended so as to make secondary education freely accessible without payment of fees to all capable of taking advantage of it.

Colonel Wedgwood said that he was for a decent, true education, and therefore welcomed the amendment. Opportunities for secondary education would do more for uplifting the people than compulsory attendance at continuation classes or vocational education.

Mr. Whitehouse said that the desire of the supporters of the amendment was to have as a part of the national system free secondary education for all children who pass through the elementary schools.

Mr. McKenna thought that the amendment supporters were pressing the President of the Board of Education a little unduly. Did honourable members suggest that the 92 per cent of children who they said had not gone to secondary schools would have gone to such schools if there had been room for them? A very large proportion of parents had no idea desire to send their children to secondary schools, but even if all the children in the country were desirous of secondary education there would not at present be a sufficient supply of teachers and of school buildings.

Mr. Fisher, after further discussion, said he would give an undertaking to propose to insert words which would constitute a specific direction for local education authorities that in making provision for secondary education they should pay attention to making the education acceptable to children desirous of obtaining it however desirous they might be of obtaining it.

The Committee divided, and the numbers were:

For the amendment	55
Against	172
Majority	117

There has been a notable increase since 1900 in the number of free places and scholarships available for secondary school pupils. At that time the number of scholarships held by former pupils, both boys and girls, of the public elementary schools was only between 5000 and 5500 for all England. [133, 132.] Hence it can be seen that the opportunities at that time "for any popular secondary education were relatively negligible." [133, 132.] Since that time, however, and especially since the war began a remarkable advance has been made. When Mr. Fisher laid

his "Educational Estimates" before the House of Commons in 1917 he stated that at that time "about 34 per cent of all pupils in the secondary schools are ex-public elementary school scholars holding free places, another two per cent held scholarships."

Mr. Fisher further states: "It has been suggested to me that secondary education should be free, and the establishment of a system of free secondary education is an ideal with which I have great sympathy. It may be that the simplest way of attaining this object would be to abolish all fees in secondary schools . . . but this would raise highly controversial questions." This is where the question was left.

Continuation Schools May Develop into a System of Universal Free Schools. What is the possibility that universal free secondary education may grow out of the continuation schools? Eight hours a week for four years of the kind of education that the English contemplate giving in the continuation schools seems to an American observer very much like a type of secondary education based on modern studies. Attendance at these schools is free. The next logical step would be to provide full-time education of similar type for those who can avail themselves of the opportunity.

As soon as the continuation schools have come into their full power, it is unreasonable to believe that there will not be a gradually increasing number of pupils who will desire more than eight hours of this kind of training, but who are not able or willing to pay the fees for the secondary school, and are not successful in securing scholarships and free places. It is inconceivable that the English educators will not attempt to supply this demand when it is felt, and this will be a step toward the American system of free secondary education for all. By the plan of some cities it was already possible for the pupils of evening continuation schools to get right up to the universities. [167, 252.] The following quotation from Mr. Herbert Lewis, Parliamentary Secretary to the Board of Education while the Bill was in Committee, sounds very much like the educational philosophy which is the basis of American free secondary education. "It is true," he says, "that some boys and girls are no good at books; but these will be educated not only through their heads, but through their hands and eyes by means of manual training. In the opinion of the Board of Education there is no class of boys so dull that they cannot profit

by the instruction they will receive at the continuation schools." [203, June 6, 1918, p. 230.]

The Workers' Education Association Favors Free Secondary Education. As further evidence that the continuation schools may develop into full-time free secondary education, the following is a resolution from the Workers' Education Association. [219, 344.] "That compulsory part-time education of not less than 20 hours per week (including time spent in organized games and school meals) be provided free for all such young persons as are not receiving full-time education." If such a policy should be adopted England would be far on the road toward universal free secondary education of the American type.

The *Times Educational Supplement* seems to think that the continuation schools are destined to develop into some kind of universal free school system: "There will be no achievement of great reforms in education, no real reconstruction of national life, unless the day continuation schools evolve into a real system of intermediate education, the inevitable development for all children and young persons of an adequate preparatory education." [203, January 9, 1919.]

Public and Private Schools

Up to 1902, contrary to the practice in America, by far the stronger part of the English system of secondary education was built upon private enterprise, the numerous endowed and private schools completely dominating the educational field. [94, 250.] Many municipalities throughout the country had established by the law of 1870 public "board schools" for elementary pupils under the control of local authorities, but the central government had attempted nothing, at least almost nothing, before 1902. A national system of secondary education in England really began with the agitation which led up to the Act of 1902. Since then the growth in publicly supported secondary education has been truly remarkable, but even yet the State does not attempt to cover the whole educational area. It has looked for support from private schools and in turn has been willing to coöperate with them even to the extent of making grants to those that are efficient.

This policy of coöperating with private schools is due to an inherent English characteristic of preferring private enterprise

to state action. Consequently, one does not find a publicly supported and publicly controlled school alongside a private school competing with it for students as is found in the United States. The policy of the Board of Education is to place no State school in a community where an efficient private school is already in existence. Mr. Fisher has explained his position as in favor of the utilization of whatever efficient private schools may already exist. Such efficient schools will not, therefore, be deliberately abandoned. [203, March, 1919, p. 85.]

England favors a variety of schools [203, July 11, 1918, p. 293; and 167, 187], and has public schools and private schools; grant-earning and non-grant-earning schools; technical and commercial schools; and the regular secondary schools. There are, thus, two kinds of varieties of schools which must not be confused: (1) Variety of administrative systems; (2) variety of types of schools within a system. Under the first head would come public and private schools, while under the second would come comprehensive and type schools. The first of these will be discussed in this section, while the latter will be taken up in a later section.

On the question of public and private schools the United States emphasizes public schools, while England fosters public and private schools. In the middle of the last century John Stuart Mill cautioned his countrymen against a uniform system of schools. He was thinking more particularly about the possibility of a state system of schools monopolizing the educational field, a step which he thought undesirable. A public system of schools should be only one of many. He said: "A general state system of education is a mere contrivance for moulding people to be like one another, and as the mould in which it casts them is that which pleases the predominant power in the government, whether this be a monarchy, a priesthood, an aristocracy, or the majority of the existing generation; in proportion as it is efficient and successful, it establishes a despotism over the mind, leading by natural tendency to one over the body." [132, 205.]

This ideal of variety was later urged by the Bryce Commission on Secondary Education just before the close of the last century. This Commission reported strongly in favor of maintaining a variety of secondary schools. [203, June 6, 1918, p. 230.] Variety both in types of schools and administrative systems was prob-

ably meant. Sir Michael Sadler has later still expressed the English ideal as "variety set in a national framework."

All the evidence seems to point to a continuance of this policy. While the recent Education Bill was in Committee it was evident that the old ideal of variety was still strong. Sir H. Craig thought "it better to have a public system with two or three grades of schools than only one narrow type." [203, July 4, 1918, p. 278.] Such discussions in Committee caused several sharp encounters and care had to be taken to safeguard the policy of a variety of schools, for it was feared that it was the intention of the Board of Education to set up a purely state system of schools and thereby compel the private schools to close their doors. This question was one of the chief obstacles that had to be overcome in the passage of the Bill. It was, however, made plain by the friends of the Bill that such was not their intention, but to improve education everywhere, and if the hundreds of private schools that were mere shams were brought to book it would be beneficial to efficient schools of every type. England thereby encourages efficient schools of every kind, but discourages those that are inefficient of whatever type.

The difficulty in England was for a long time that there were hundreds of private schools that were inefficient. The new legislation will, it is thought, drive out of business many of the inefficient ones and force up the standard of the others. Mr. Fisher has admitted that the weaker private schools will in the future find it difficult to compete against the state system. He is reported to have said that the "changes which had been accomplished since he came to the Board of Education two years ago had tended to increase the weight and power of the public as opposed to the private system of education in the country. More money had gone to the teachers, both in the way of salary and of pension, larger grants had been procured for secondary and elementary schools, and it had consequently been made more difficult for weaker schools, standing outside the State system and depending on voluntary contributions to compete with the schools aided out of public money." [203, March, 1919, p. 85.]

Since the teachers in the State supervised secondary schools, according to the new salary schedule, are to receive larger remuneration in the future than hitherto, and in addition a pension when they retire, and since teachers, if they are not teaching in an effi-

cient school, cannot get their names on the Teachers Register which certifies them as efficient teachers, the best teachers are almost sure to be called into the State supervised schools. This will probably cause many private schools to go out of business. Consequently, it may be expected in the future that the State supervised schools will gradually forge ahead of the private schools.

The American Attitude toward Private Schools. In the United States private schools exist by toleration. Rarely, if ever, does the State give financial assistance to private schools. Public opinion is probably crystallized in the following statement from the Smith-Towner Bill. It says: "No such sum shall be used by any State, county, district, or local authority, directly or indirectly, for the support of any religious or privately endowed, owned, or conducted school or college, but only for schools entirely owned and controlled, and conducted by the State, or county, or district, or local authority, as may be provided for under the laws of said State." [172, Vol. 8, 269.]

In the United States an increasing attempt is being made to make free public secondary education accessible to all. Private schools almost always charge fees, and for this reason they have been relatively declining and there is no reason to think that their prospects are bright for the future. In England free secondary education has not become the rule even in the State schools. There both public and private schools charge fees and hence there is greater ease of coöperation and less likelihood that one may drive the other out of business; but it seems that public secondary schools are gaining the ascendency in both countries.

Central and Local Authorities

An important problem of educational administration is to harmonize centralized with local control. Where the system is highly centralized there is danger that a bureaucracy will develop, and bureaucratic control is hostile to the progress of democracy. Where local government is dominant there is lack of efficiency in administration and organization. The disastrous results of local control were seen both in America and England during the war. At least it was evident that the local authoritities had not developed education to an extent compatible with public safety. In both countries it was learned that many men of draft age could neither read nor write, and a still larger per cent were physically unfit.

Such a state of affairs is disastrous to the welfare of a nation and the question was raised as to whether the central government should not do more for education than in the past. Consequently, in both countries even while the war was still going on legislation was introduced to remedy these matters. England passed the Education Act of 1918 (the Fisher Bill) which tends strongly toward a national system of education but at the same time carefully safeguards the rights and privileges of local authorities. The United States passed the Smith-Hughes Act for Vocational Education which may be regarded as the beginning of a national system of education, and there is now a bill pending in Congress (the Smith-Towner Bill) which, if passed, will be a still further advance in that direction.

Variety and Liberty Are Educational Watchwords in England. "Variety" and "liberty" are the two words that more adequately characterize the educational ideals of England than any others. The whole administrative machinery is so organized as to preserve these ideals, and any legislation which attempts to control them unduly is headed for the shoals. The first draft of the Act of 1918 had to be withdrawn because it was suspected as an attempt to control the local authorities. The final draft carefully safeguards this point.

The English are just as desirous that schools of the same type in different educational areas shall show originality as was seen to be the case in their desire for a variety of administrative systems, of both public and private schools. "England seems to fear one thing, namely that the teaching shall present a deadly uniformity throughout the country and be unrelieved by the faintest spark of originality." [167, 187.] The central authority encourages experimentation and the development of new schemes in various places. "The only uniformity of practice that the Board of Education desire to see in the teaching of the public elementary schools is that each teacher shall think for himself, and work out for himself, such methods of teaching as may use his powers to the best advantage and be best suited to the particular needs and conditions of the school. Uniformity of details in practice (excepting the mere routine of school management) is not desirable even if it were attainable. But freedom implies a corresponding responsibility in its use." [108, 9.]

The result of the attempt to attain uniformity wherever it has

been tried is to kill local initiative. This the English feel must be prevented at all costs. Democracy demands that local communities be stimulated to do their own thinking. Educational progress cannot be imposed from without. No education can succeed that is not adapted to individual and local needs; hence the autonomy of the local authority was preserved in the recent Education Act, and the psychological effect of having the people do their own thinking was not lost. The chief danger of centralization is that the central authority may dictate to the local authority, which in turn dictates to the teacher, who dictates to the child. Centralization is bound to affect the relation of the teacher and child, which is the one important relation.

England recognizes all these things and the relation between central and local authorities is intended to keep these conflicting tendencies harmonized. The quotation from Kandel above refers to public elementary schools, but it is equally applicable to secondary schools. While the recent Education Act was in Committee an amendment was offered to the effect that the Board of Education should draft a model scheme for the assistance of the local authorities in making out their schemes. Mr. Fisher refused to accept the amendment. The Board, he explained, was ready to give advice and assistance to the various local authorities separately, but the needs of the various areas were so diverse that however well it might suit one area it might not be at all suitable for another. A model scheme in such case might be accepted prematurely and hence relieve the local authority from thinking out its own local problem.[1]

Relations of Central and Local Authorities in England. This is the extent to which the idea of local initiative and liberty has been carried in England. The direct relations of the central authority to the local authorities may be divided into three parts. (1) Each local authority in order to receive a grant must submit a scheme of all the proposed educational work in its area to the Board for approval. (2) In making such schemes the Board does nothing except offer suggestions of various sorts. It must, how-

[1]Since then, however, the Board has issued a comprehensive list of suggestions for making schemes. These suggestions were formulated not by the Board alone but by the Board "with the assistance of a committee, which included representatives of local education authorities of all types." [203, March 20, 1919, p. 133.] These suggestions were intended only as an aid to a local authority in determining the needs of its educational area.

ever, consider whatever schemes are submitted and approve or reject them. In case of rejection after a conference the local authority may appeal to Parliament. The function of the Board is to "educate for education" and it does not have any compelling power except the withholding of grants. The central authority attempts only to stimulate and coördinate. (3) The Board has the right to inspect any school that receives a grant, as no school may receive a grant that is not efficient. (4) If a scheme of a local authority is approved and the schools are declared to be efficient, then the Board agrees to pay the appropriate grant.

It is felt that the "main function of a Ministry or Board of Education should be the coördination of effort of every kind." [203, October 24, 1918, p. 453.] In addition to submitting schemes the local authority should carry out the broad principles laid down by the Board and "provide the machinery for various forms of education, to receive and disburse the government grants for schools and to levy local taxes to make up the excess costs of education over the grants received from the Government." [168, 25.]

Inglis calls attention to the fact that the Board of Education has "adopted a scheme of granting national funds to local schools as a means of bringing the secondary schools under its supervision and to some extent under its control" and "acceptance of aid from the Board of Education and submission to its supervision" constitutes a situation in England at the present day somewhat analogous to the situation in the United States in the middle of the nineteenth century when the public high school was in the midst of its struggle for supremacy with the private academy." [94, 251–52.]

Local Authorities also Allocate Authority to Still Smaller Authorities. So certain are the English that education cannot be administered from the central authority that provision is made for the smaller areas to split up and allocate authority to still smaller areas. Kent County found itself so large that it is proposed to establish educational areas, and the same function be assumed by the County authority in relation to them as the Board of Education exercises for the nation, that is, coördinate and stimulate. [203, August 1, 1918, p. 331.] Sandiford [168, 25] thought even before the recent Act that "in the English schemes are potentialities greater than those of any other country in the world." It

seems that relation between central and local authorities has been more nearly perfected in England than in any other country.

America Has Not Harmonized Local and Central Control. No plans for the harmonization of the local and central authorities have been made in the United States. There are as many systems as there are states in this country. The only experiments thus far made are the Morrill Grant of 1862, the Smith-Hughes Act of 1916 and the Smith-Towner Bill. There are some educationists in the United States who think that these Acts show a tendency toward undue authority on the part of the central government, that they dictate unduly to local authorities.

American education has tended to educate a pupil only for the locality in which he lives. Individualism has been developed but not individualism in a national framework as in England. Education has not been universal as 700,000 men of draft age could not read and write English at the outbreak of the war. That it has not been efficient is evident from this same fact. Local needs have been cited as the basis for the organization of schools. When the point is pressed, however, there has been no consensus of opinion as to what are local needs. The interpretation of local needs has frequently been entirely too narrow. The following is a typical American statement: "It is perfectly natural that industrial and commercial subjects should be emphasized in the Haywood and Bancroft schools (situated in industrial districts) while in the McKinley school (situated in the old high school building) these curriculums should be paralleled by a liberal arts curriculum. . . . A wise superintendent and board will adapt the junior high school as far as possible to local conditions." [141, 265.]

This seems to be a rather narrow interpretation of local needs. High praise has frequently been given to certain attempts to organize schools to meet local needs. Yet when we examine the work done in such schools, the ultimate needs of the pupils seem barely to be touched, however well the immediate needs may have been met. An understanding of the meaning and duties of citizenship as broad and as sympathetic as any other community enjoys are the ultimate needs of any community. The immediate needs may only call for a vocational and professional career. From the national standpoint the ultimate individual and social needs of one community are the same as those of another.

From the standpoint of method it may be perfectly justifiable to *begin* such a school on this basis. One must start where the community and the pupils are. From the known to the unknown, from the immediate to the remote, are fundamental laws in method. Perhaps the best way to deal with a backward community, or a backward race, (witness Tuskegee, for instance) and get it started on the upward climb, is to appeal to its immediate needs; but to *continue* the school on that policy is often to go contrary to the fundamental doctrine of ever increasing growth as explained by some of our present day educational philosophers. What was at first a means to an end becomes an end within itself. If one's philosophy of education is founded on the former basis it is too shortsighted and narrow. Only when the immediate *and* the ultimate, the local, national, *and* international needs are taken into consideration is there proper provision for ever increasing growth.

No such harmonization of the relations of the central and local authorities as has been shown to exist in England has been worked out in the United States, not even in the separate states. State support and State control have been retarded because of the "clashing of these two kinds of machinery. Traditions of local self-government, fear of bureaucracy, distrust of officials who cannot be seen, have led the people to dread the results of state participation in the management of the schools," to quote Payson Smith. [179, 393.] On the other hand, state departments "need to look upon themselves, and try to get others also to regard them not as outside agencies coming in to determine the practice and procedure of education as with supernal wisdom." [179, 393.]

Education Is a National Concern. Soon after the outbreak of the war America was awakened as never before to the fact that "education does not break down anywhere that the people as a whole do not share the loss. By the same token, education universal and efficient means safety and prosperity common to us all." Consequently, the slogan that "the wealth of the nation should develop the children of the nation" has become popular. "As a major premise I submit," continues Smith, "that the time has arrived when the resources and common purpose of our people should get behind our educational program, when we must accept the principle that we will tax wealth wherever it is for the education of children, wherever they may live, for the solution of our

educational problems, wherever they are found, for the production of that equality of educational opportunity without which democracy can never realize itself to the full." [179, 393.]

This was the dominant note at the meeting of the Department of Superintendence at Chicago, February, 1919. The Smith-Towner Bill has the particular purpose in view of putting education on a national basis and since it carries an appropriation of $100,000,000 it will have a wide influence. This is the strongest attempt ever made in the United States to put education on a national basis. It remains to be seen whether it will be successful.

Comprehensive Versus Type Schools

The other kind of variety of secondary schools mentioned in a previous section, was that of cosmopolitan versus type schools within an administrative system. The English do not favor a single type of school, for it is thought that only one type of school is neither democratic nor is it best for the nation. It is undemocratic because it offers no choice to the parent in the selection of schools. It is not best for the nation because it tends to "make all alike." Progress is best fostered by variety.

England Favors a Variety of Types of Schools, America the Comprehensive Type. All the evidence seems to point to a continuance of this ideal of a variety of types of schools in England, while in America the tendency seems to point in the direction of the comprehsnsive (sometimes called composite or cosmopolitan) type of school. Badley [8, 18–19] says of the English system that "for those who can postpone most of their specifically technical or professional training, there must be secondary schools of various types. Public Schools, Grammar Schools, County Council Schools, and so forth, can all have their place, and perform useful functions in a national system." Later, however, Badley says that the question as to "whether several different 'sides' are possible in one and the same school or it is best at this stage to have complete differentiation of schools into technical, scientific, classic and commercial can only be answered by experiment." [8, 60.]

It is Mr. Fisher's opinion [203, July 4, 1918, p. 278] that "Local education authorities should bear in mind the need of providing different types of education for different types of children," and in the administration of schools the local authorities

are required to provide a variety of schools in each area and to correlate and coördinate the activities of the various schools. There is, moreover, to be joint action among groups of schools. Each school is not to live to itself alone. [172, Vol. 7, p. 322.] For instance, provision must be made by the local authority in each area for the study of Latin and Greek either within the area or in coöperation with another area, but it is not expected that each school will offer these subjects. Similarly advanced courses in Science and Mathematics, and Modern Studies must be provided in each area but not necessarily given in each school. Unnecessary duplication of efforts is to be prevented by the proper correlation and coördination of effort among the schools. Emphasis is laid on the fact that "effective organization of secondary education in an area is impossible if each school is treated as an isolated unit, free to take its own line independently of all considerations except its own efficiency and prestige, competing and not coöperating with other schools." [173, February 1918, p. 59.]

Reasons Why America Favors the Comprehensive Type of Secondary Education. This tendency for schools to compete and not coöperate is just what is feared in the United States, and is what they are sure will happen if a variety of types of schools should be the custom. It is certain that a great amount of overlapping and duplication of effort will take place, leading to uneconomic practice. Hence the comprehensive type is popular in the United States. American educators are afraid of this antagonism between schools because experience has proved it to be the case in practice. The state universities in several of the states have had this problem to face wherever there has been a division of state schools into state universities and agricultural and mechanical colleges. Competition has been a detriment to the growth of each and the newer universities have not made any division along these lines. The Universities of Minnesota and Florida, for instance, have consolidated the colleges of engineering, law, education, agriculture, etc., as well as the college of liberal arts under one management on the same campus.

To prevent this destructive rivalry between schools there is a similar movement in secondary education. Judd, of the Cleveland Survey staff, found [100, 228–32] the same disastrous effects of many types of secondary schools as was just noted in the case of

the universities. He recommended a change to the comprehensive type. He found, as a matter of fact, that some of the high schools which began as commercial or technical high schools had in practice developed into comprehensive high schools.

The United States favors the comprehensive type of high school, in the second place, because it is democratic. A typical attitude is given in the following statement by Rynearson [165, 698]:

> To segregate those who are going to college from those who are preparing for industrial and commercial life may engender snobbishness and lead to a social division on a false basis of education or vocation. We do not want to transplant the stratified society of Europe into democratic United States. Pupils of high school age should develop sympathy and respect for phases and conditions of life other than their own. This is more easily accomplished where all classes meet on a common basis in the recitation rooms and on the playground.

The United States favors the comprehensive high school, in the third place, because of its greater adaptability to individual needs. If ill-adjusted the pupil can more readily change from one curriculum to another than from one school to another.

In the fourth place, the comprehensive high school is favored because of certain administrative reasons, such as the attainment of certain objectives, as health, worthy use of leisure, and homemaking, proper provision for which is almost prohibited in the smaller type of school. [42, 26.]

In several of the surveys that have been made in recent years it has been strongly recommended that the type of secondary school universally established should be of the comprehensive type. The Surveying Committee [169, 294–5] of San Francisco reaches the conclusion that "the school authorities in San Francisco are to be recommended for the adoption and announcement of the following progressive program with reference to the high school courses of study: (*a*) Proposed abandonment of the principle of 'type' high schools, and introduction into all schools of as many as possible of the foundational subjects of the first two years. (*b*) Virtual acceptance of the principle of the cosmopolitan curriculum." The Surveying Committees of Boston and Saint Paul reach the same conclusion.

In addition to these statements there are other agencies that are strong advocates of the comprehensive type of secondary school even in the large cities. One of the "articles of faith" of the

School Review [193, 67] is that the comprehensive high school should be the type of secondary school in the United States. The Commission on the Reorganization of Secondary Education give it their approval: "The comprehensive . . . high school, embracing all curriculums in one unified organization should remain the standard type of secondary school in the United States." [42, 24.] The Commission adds that the "junior high school must be of the comprehensive type whatever policy be adopted for the senior high school since one of the purposes of the junior high school is to assist the pupil through a wide variety of contacts and experiences to obtain a basis for intelligent choice of his educational and vocational career."

Inglis [94, 698] states that "within recent years there has been manifest a growing tendency in cities to establish a series of special-type high schools, industrial schools, practical arts high schools, and the like." The Surveying Committee of Saint Paul makes the same statement [166, 550]. Inglis shows, however, that "nearly eleven-twelfths of all the public high schools in this country are located in communities of less than eight thousand population each, those high schools having on an average from sixty to sixty-five pupils each. [94, 120.] In England, however, because of the denser population a system of regional schools may be established without any great inconvenience, but this is next to impossible in all but a few places in the United States. "One hundred cities of over 50,000 population would probably be a liberal estimate of the number of communities which might be able to establish systems of special type high schools, and even there not more than two in most cases." [94, 699.]

It is obvious, therefore, that a system of type schools is not possible in most places in the United States, and even where it is feasible to establish such a system it has been shown that the comprehensive type of secondary school will be the type of the future in the United States.

Dr. David Snedden is the only prominent American educator who has been found in this investigation to favor a variety of type schools. "He is a poor student of educational aims and methods," he says [184, 173] "who thinks that the tailor, barber, and locomotive engineer, coal miners, (nineteen other vocations here mentioned) are all going to be trained vocationally in some phantastic 'cosmopolitan,' 'democratic,' high school of the future. . . .

Vocational public schools for each and every one of the above vocations, as well as hundreds of others, we are destined to have, and each of these schools will be expected eventually to turn out workers trained relatively for the immediate exercise of their vocations no less completely than is now the West Point second lieutenant." Snedden thinks that the commercial, the home-making, and the industrial schools "should be completely independent of each other, just as each should be independent of schools of liberal education as regards organization, staffing, equipment, etc." [183, 71.]

A proposal to separate vocational and liberal education into separate schools has been fought out very vigorously in the legislature of Illinois. The decision against such separation seems to have been accepted as final and since then no other state has attempted to pass a law making a separation of schools into types. The policies of the Federal Board of Vocational Education may have a tendency in this direction. This remains yet to be seen. Although there is strong opposition to the comprehensive type of secondary school in some quarters nevertheless the consensus of opinion seems to be in its favor.

It is possible that England on account of its comparatively homogeneous population needs to take care that variety of abilities be developed, while the United States on account of the heterogeneity of population needs a melting-pot. One of the facts brought out by the war was that the Americanization of a large part of the population is one of the important problems facing the American public today. Consequently it is possible that the comprehensive type of secondary school is better suited to the needs of the people of the United States and at the same time a variety of types is better suited to English needs.

Articulation

In the preceding chapter it was stated that there is considerable dissatisfaction with the work of the last two years of the elementary school. In America it is stated that the high school pupils at graduation are two years behind their European contemporaries. [172, Vol. 7, p. 269.] It is claimed that the pupil is only marking time in the last two years of the elementary school and since large numbers of pupils cannot remain beyond the age of fifteen or sixteen social efficiency demands that this time be saved. It is

further maintained that the pupil by the age of twelve has sufficiently mastered the tools of knowledge and is sufficiently matured mentally, to enable him to profit by secondary school subjects. Consequently, there is a demand for a reorganization of secondary education so that the pupil will pass from the elementary to the secondary school about the age of twelve.

The Age of Twelve the Dividing Line Between Elementary and Secondary Education. It seems that the age of twelve is also coming to be the dividing line between elementary and secondary education in England. However, there are two important differences in the two countries: (*a*) There continues to be an overlapping of two or three years in England between elementary and secondary education. In America there is no such overlapping. (*b*) The English 6–4–2 plan is different from the American 6–3–3 plan in that at the end of the four year period in England the student may take the First Examination. If successful in this he may pass immediately to the university thus saving two years over the American student. However, his chance of taking an Honours degree at the university rather than simply a Pass degree is not great and the more ambitious student will remain for the Second Examination taken two years later, and in the meantime he pursues Advanced Courses which prepares him for the intensive specialisation required later for an Honours degree. These two years are more similar to the American junior college than to the last two years of the American high school.

It seems that this organization will continue for the next few years in England. This belief is based on the facts (*a*) that Advanced Courses have already been established under the Regulations for Secondary Schools for 1918; (*b*) Statements from writers and reports of committees favor the tranference to secondary school not later than twelve; (*c*) Transference to junior technical, junior commercial and central schools is already made at twelve.

The only question concerns the age of transference to the regular secondary schools. Individual writers state that a decision as to the kind of school one is to attend should be made "by the age of 11 or 12 at the least." [8, 53; and 67, 265. See also 173, April, 1915, p. 131.] The Committee on the Position of Modern Languages in the Educational System of Great Britain found [43, 71] that "recent administrative changes have brought it about that in many districts pupils are trans-

ferred at or about the age of twelve." A similar Committee on the Position of Science thinks that children can learn science at an earlier age than fourteen or fourteen and one-half [44, 12]. This Committee is of the opinion that the position of science depends on this twelve to sixteen organization [44, 9]. Also a committee appointed by the British Association says that "free places should not be awarded to children above twelve years of age." [172, Vol. 9, p. 440.]

The Plan of Articulation of the Times Educational Supplement. Another plan, strongly advocated by the *Times Educational Supplement* as early as December 7, 1915 (p. 143), proposes that: "Education should give an outfit for life. We need a revolution in the conception of education in its relation to the life of a people, and we need machinery that will make the new conception operative." This periodical advocated an amalgamation of elementary and secondary education by which plan elementary education should disappear and "preparatory" education would take its place. This amounts to the same thing as the American practice of sending all pupils to elementary school for the first years of school life and all to the secondary school for later years. By this plan the "preparatory" stage of the child's education would extend up to the age of eleven and superimposed upon it would be four years of liberal training compulsory for all. "The present system," says the *Times Educational Supplement* (October 5, 1915), "turns certain elementary schools into cramming schools for scholarships."

The *Times Educational Supplement* has later stated that "it will be perfectly easy, from an administrative point of view, to reorganize the schools so as to allot certain buildings to children under twelve years and others to children between eleven and fifteen in which a strictly secondary education will be available for all." [March 20, 1919, p. 139.] The adoption of this scheme is probably remote unless the continuation schools evolve into a system of secondary schools for the lower and middle classes.

If this plan should be adopted, admission to the secondary school will be conditioned on completing the elementary curriculum. In England, hitherto it has been based upon entrance examinations. The United States, on the other hand, seems inclined to move away from this system and make age the basis for admission to the secondary school. (See above, p. 19.) This is

one of the most revolutionary recommendations of the last few years. This tendency is exactly in line with the American belief that secondary education should be universal. It is thought that a pupil will benefit more from associating with pupils of his own age than with younger pupils even though he may not have attained a higher degree of advancement than the younger pupils. Reference has already been made to the fact that the Commission on the Reorganization of Secondary Education recommended that every child of high school age should be transferred to the high school at the beginning of the high school period. [42, 16. See also 48, 217–19, and 166, 617.] The Commission is also of the opinion that a similar obligation rests upon the college.

Admission to College by Mental Tests. There is also a movement on foot to admit students to college on the basis of mental ability rather than on that of information ready at hand. For the old-fashioned entrance examinations psychological tests will be substituted. In the future Columbia University will admit students according to this plan, although the entrance examinations of the customary type will not be discontinued for the present. A similar experiment is being tried at the University of Florida. In 1916 Haggerty of the University of Minnesota gave a series of tests to the candidates for entrance to the medical school of that institution. Haggerty thinks that his results "mean that an entrance examination board can determine by three hours work the fitness of one hundred applicants for the work in a medical school more exactly than they can derive such information from the laborious examination records, often hard to obtain and equivocal." [203, February 20, 1919, p. 85.] Thorndike, who has charge of the tests at Columbia, makes a similar claim that "A psychologist who scored the group from a two-hour test with pencil and paper, never seeing one of them or knowing anything about any one of them save the test score, would probably come nearer the true estimate of their intelligence than the average single judge on three months' acquaintance." [172, Vol. 9, p. 194.]

The result of this movement, if adopted widely, will be to eliminate the old cramming college preparatory curriculum as such in the high school. The high school will, thereby, be freed from college domination. It can then work out its destiny as the school for the development of adolescents in all their varied capacity.

The articulation of the elementary school with the high school and of the high school with the college would under these conditions be much simpler than at present, but the scope of the work in the high school and also in the college would be much more complex than at present, for individual aptitudes would have to be much more carefully taken into consideration. It will break up the old tradition that each year's work is dependent upon the preceding; and bring about the following state of affairs: "The tradition that a particular type of education and that exclusively non-vocational in character, is the only possible preparation for advanced education, either liberal or vocational, must give way to a scientific evaluation of all types of secondary education as preparing for continued study." This will mean that "pupils who during the secondary period devoted a considerable time to courses having vocational content should be permitted to pursue whatever form of higher education, either liberal or vocational, they are able to undertake with profit to themselves and to society." [42, 17.]

Only the following statement by Rev. William Temple has been found to indicate that the English are looking to the same solution. "The tutorial class movement has made two discoveries. . . . The other discovery is this. A man who has had no secondary education at all can take up work of the university type when he is of full age if his mind has remained alert. I believe that many continuation classes fail through ignorance or neglect of this fact. We always tend to restart the teaching process at the exact point which the student has reached when he left school. This is a mistake. The man or woman whose education ended at fourteen or thirteen, and who becomes desirous of more at twenty-one or later, has lost much in the way of knowledge; but if the mind has remained alert the development of faculty has gone on and the appropriate method of study is that of the university and not that of the secondary school." [198, Vol. 4, p. 578.]

It seems certain, therefore, that by whatever policy pupils are admitted to secondary schools, it is more and more agreed that the age at which admission should be granted is about the age of twelve.

Conclusions

From the preceding discussions it is seen that the English and the American systems of secondary education are different in some respects and similar in others. The chief difference is that of universal secondary education, and out of this grow many of the other differences. Differences as to free secondary education, public and private schools, comprehensive and type schools are outgrowths of the more fundamental difference in regard to universal secondary education. England has not adopted a system of universal secondary education and hence has not adopted free secondary education; and believes in both public and private schools, and a variety of types of schools, while American tendencies are in the opposite direction. However, it seems probable that the development of the secondary schools in England will be accompanied more and more by a growth of universal free secondary education of the American type. In regard to a national system of secondary education American and English practices are not so divergent, though England has progressed much further in that direction than the United States. In regard to articulation between secondary and elementary education the tendencies seem to be about the same, the dividing line being about the age of twelve.

CHAPTER III

THE ORGANIZATION OF THE PROGRAM OF STUDIES IN ENGLAND AND THE UNITED STATES

The number of studies offered in a modern school system has increased to such an extent that it is impossible for any one pupil to pursue them all and this has made differentiation of curriculums[1] necessary. Multiform division of labor in adult life has indicated to modern educators that there should be a correlative specialisation in school life. Therefore, there has developed in some places the practice of differentiating curriculums in such a way that the pupils' program shows a high degree of specialisation, even early in the high school period.

Democracy Demands Diversity and Unity

How early in school life specialisation should begin and to what extent it should be carried is, at present, one of the most prominent problems in the organization of the program of studies, for in a democratic school system two characteristics should permeate every program of studies: one is diversity; the other sequence or unity. What the program offers to the pupil should be rich in the number of its offerings to the end that any pupil may find in it the kind of studies that will enable him to cultivate his individual aptitudes. For democracy demands that there be a sufficient diversity for any child of normal mentality to find the kind of training that will properly develop his mental and physical capacities. The pupil's individual program should also be rich in social content for the purpose of developing a broad and sympathetic insight not only into his own calling but also into the work of his fellows, for it is an essential need of democracy that one be socially efficient as well as individually efficient. The program of studies should, therefore, provide for each pupil an experience that shall be full and varied and at the same time

[1] The terminology here used is the same as that used by C. H. Johnston [97, 583–4]. A "program of studies" is the total offering of a school. A "curriculum" is "any schematic arrangement of courses which extends through a number of years and which leads to a certificate or diploma, and which is planned for any clearly differentiated group of high-school pupils."

be unified in spirit. This experience should not be narrow and monotonous in its unity, but still it should be a unit and not separated into disconnected bits. One should eventually be prepared both for an enlarged life in a democracy and for specialisation.

Two fundamental questions arise: Can the program of studies be so organized that breadth of outlook may be the result without at the same time sacrificing efficiency of administrative execution? Is it possible to select subjects of study so that they will reinforce one another instead of constituting ends pursued at one another's expense? [56, 291.] In many schools there is an undesirable rivalry between the subjects of the program. This is neither conducive to diversity nor to a wholesome sequence and unity. Diversity and unity are not contradictory so that when one is present the other is necessarily absent, but they are complementary so that when one is present it promotes the other. Thus on every hand the problems that curriculum makers must face are twofold.

Qualities Desirable in a Democratic Society

The reason that any program of studies should attain the ends that are implied in the preceding paragraph is that they are qualities which are most desirable in a democratic society. "The ideal of a democracy," says the Commission on the Reorganization of Secondary Education, "involves, on the one hand, specialisation whereby individuals and groups of individuals may become effective in the various vocations and other fields of human endeavor, and, on the other hand, unification whereby the members of that democracy may obtain those common ideas, common ideals, and common modes of thought, feeling, and action that make for coöperation, social cohesion and social solidarity.

"Without effective specialisation on the part of groups of individuals there can be no progress. Without unification in a democracy there can be no worthy community life and no concerted action for necessary social ends. Increasing specialisation emphasizes the need for unification, without which a democracy is a prey to enemies at home and abroad." [42, 21.]

It follows that within any group of people due opportunities must be afforded for the development of individual strength and initiative. There is, likewise, a necessity for specialisation of the

members of the group. The efforts of individuals should be coördinated and directed toward well chosen ends for the good of the group. This implies a need for the mobilization of thought and just as much need for its diffusion. Individual efficiency and originality must be supplemented by social efficiency, for "unification, organization, harmony is the demand of every aspect of life—politics, business, science." [58, 19.] The high points in the development of nations in the past have come after periods of wide individual freedom and development. The low points have come either after freedom and individuality have been suppressed or after it has been carried to an extreme, and socialization and coöperation have been reduced to a minimum. A static society is characterized by uniformity, while a dynamic society encourages change and diversity. If a society is to grow there is need for both diversification of efforts, on the one hand, and unification and coördination of activities on the other, and this becomes more and more necessary as society becomes more and more complex. The greater the number of instruments in an orchestra the greater the need for the various parts to be correlated and harmonized, and so it is in a complex society.

Curriculum Organization in England

Every program of studies should in some way endeavor to secure these several complementary values. In both England and the United States such attempts are being made. The attempts to solve these problems of curriculum organization in England has had its history with certain definite results. For more than half a century the English educators have waged a bitter conflict over the question as to the relative values of the curriculum, especially of science and the classics. This question was raised shortly after 1850 by such eminent men of science as Huxley and Spencer and has been waged intermittently ever since. The point was gradually yielded that it was inexpedient to treat all pupils alike and hence some kind of differentiation was necessary. As a compromise between the advocates of the two types of subject-matter there resulted a bifurcation of the secondary school curriculum into "Sides," classical and modern. Other sides have been added since this first division. It was expected that those students who were most interested in classics would specialise in them from an early age, practically neglecting other

subjects, and those who were most interested in modern subjects would specialise on the modern or scientific "Side." Despite this concession, however, the English conception of liberal education continued to be thought of in terms of language and literature, and secondary education was predominantly classical up to the outbreak of the war.

The following statement by Sir F. G. Kenyon seems to be an accurate description of the English situation:

> It can hardly be necessary to labour the point that the examination for entrance scholarships at the universities have in the past been the main cause of premature and excessive specialisation at schools. So long as pecuniary assistance towards the expenses of a University course could only be obtained by success in a competitive examination, school education was inevitably, to a large extent, guided and moulded by the necessity of preparing students for these examinations. When Oxford and Cambridge were almost the only Universities in England, the only chance which many boys had of obtaining a University education was to win a scholarship at one or the other of the Colleges at these Universities. Parents were therefore urgent that their boys should be prepared for these scholarship examinations, and schools were to a great extent judged by their success in these competitions. If, therefore, the scholarship examinations were specialised, the school education was necessarily specialised also. Promising candidates were taken off work on subjects other than that in which they intended to compete; specialisation began early, and was very intense in the later stages. The classical scholar did little History or Science or Mathematics during the later years of his school course; the Science student learned equally little of the Humanities. The most fortunate schools were those which had closed scholarships attached to them at one or other of the Universities, for which the examination could be accommodated to the school curriculum, instead of the curriculum being accommodated to the examination. [111, 6.]

This briefly has been the history of the development of the curriculum in England. Since the war began, however, England has undergone especially radical changes in this respect. With the outbreak of the war the old controversy between the "ancients" and "moderns" which had been more or less prominent for over half a century broke out afresh. [208, 1918, p. 68.] Then instead of trying to reorganize their schools on the basis of adjustment with modern life, they renewed the old quarrel as to the value of the various subjects. What knowledge is of most worth was the prime consideration. The scientist based his

claims on his ability to produce means for the accomplishment of certain ends. It was evident that Germany had outstripped the rest of the world in applied science. This was in the hey-dey of German success and the scientist sought to use this fact for the advancement of his special subject. On the other hand, the classicist prided himself on the fact that the classical type of education did not produce brutal materialists. He pointed to the ends which Germany had set up, and claimed that even though his type of education was not practical, that is, did not fit means to ends, it did supply worthy ends. The scientist countered with the statement that within itself science is neither good nor bad; it could just as well be used for worthy as unworthy purposes; the work of the world had to be done and science had come to be a necessary factor in that work; those in authority had made glaring mistakes by ignorance of even the simpler elements of science. Consequently, more consideration for science was claimed as essential in the modern world.

Thus the controversy waged for a year or two until a movement was set on foot to harmonize the conflicting claims. Then the question was raised as to the meaning and purpose of education; not whether this or that subject should be taught. However, the basis for the organization of the curriculum continued to be that of predominant studies rather than the post-scholastic destinies of pupils. It will be shown when the American system is taken up below that the tendency in the United States is to make the latter the basis of curriculum organization.

The Letter on the Neglect of Science which appeared in 1916 in the *Times Educational Supplement* [February 2] brought things to a head in England. A letter three months later [110, 5–8] on the other side warned against a narrow interpretation of the needs of education in a democracy. It began to seem that it might be possible to get the contending parties together and organize a curriculum in such a way that the claims of the classicists, the scientists, and the modernists might all be satisfied and at the same time the pupils derive a greater benefit from the new system than from the old. Kenyon shows clearly that recent considerations of the curriculum have been the result of an attempt to come to an agreement as to the kind of education needed under the new conditions, and to give each subject its proper place in the curriculum. The professed object of Kenyon's book [110, 4]

was "to record certain attempts that have been made to give a healthier tone to the discussion; to show that a large measure of agreement is possible among the advocates of the several subjects which form the staple of our secondary education; and to bring the weight of this agreement to bear on the solution of the outstanding problems which have been the cause of bitter controversy in the past."

The ultimate outcome is somewhat as follows:

1. Specialisation of any kind is postponed until the age of sixteen. Even after sixteen, although the student is allowed to specialise in one of three fields, Classics, Modern Studies, or Science, he is not permitted exclusive specialisation even then. Complete specialisation is deferred till the university period. The English are particularly opposed to early specialisation for vocational purposes.

2. The old division into Sides is discouraged.

3. To secure unity and sequence, the number of subjects offered is limited. It is planned to give a broad general education based upon the staple subjects properly harmonized and blended. Further than this the writer has found no plan by which the English expect to secure a desirable organization of the program of studies. It is true that statements have been found to the effect that all students should not be treated alike, but no plan of differentiation given.

The Postponement of Specialisation. On no principle of curriculum organization is there so much unanimity of agreement in England as that specialisation should be postponed at least until the age of sixteen. Almost no opposition has been found to this policy. It has the backing of the *Times Educational Supplement* and the *School World*, two of the most popular educational journals. The former states: "We need hardly say after all that has been written in these pages on the subject, that we yield to no one in our opposition to early specialisation. It should be made clear that no children are to be trained for industry before the age of fifteen." [173, August 16, 1917, p. 321.] The *School World*[1] is of opinion that "it is desirable that no specialisation of any kind (not even in Latin) should be allowed before the age of fourteen, and there are good arguments for postponing it a year beyond that." [173, June, 1916, p. 208.] Even after this age has

[1] The *School World* is now incorporated with the *Journal of Education*.

been passed, the *School World* is of opinion that "the older pupil specialising in science must not grow up indifferent to language and literature, nor the classical scholar to modern knowledge." [*Ibid.*, p. 216.]

The postponement of specialisation also has the backing of various educational and scientific associations. In Sir Frederick Kenyon's little volume, *Education Scientific and Humane*, there are as many as seven different statements from these associations to the effect that it is undesirable to specialise before the age of sixteen. Most of these are in the form of resolutions, as will appear from what follows.

The first of these statements was included in the letter of May 4, 1916 of the Council of Humanistic Studies written in reply to the letter on the "Neglect of Science" of February 2 of the same year. It says:

> Some of its (physical science's) most distinguished representatives have strongly insisted that early specialisation is injurious to the interests they have at heart, and the best preparation for scientific pursuits is a general training which includes some study of language, literature, and history. Such a training gives width of view and flexibility of intellect. Industry and commerce will be most successfully pursued by men whose education has stimulated their imagination and widened their sympathies. [110, 6.]

The next statement was a resolution signed by representatives from each of five different associations, the English, Classical, Geographical, Historical, and Modern Language. It is as follows:

> Premature specialisation on any one particular group of studies whether humanistic or scientific, to the exclusion of all others, is a serious danger, not only to education generally, but to the studies concerned. [110, 9.]

The third statement was signed by a Conference between the Council for Humanistic Studies and the "Neglect of Science" Committee:

> That in all schools in which education is normally continued up to or beyond the age of sixteen, and in other schools so far as circumstances permit, the curriculum up to about the age of sixteen should be general and not specialized, and that in this curriculum these five groups of subjects should be integrally represented:
>
> (1) Languages other than English. (2) English and History. (3) Mathematical. (4) Natural Sciences and Geography. (5) Artistic and Manual Training. [110, 14.]

The same resolution was passed by a conference between the Sub-Committee on Education of the Board of Scientific Societies and the Council for Humanistic Studies. [110, 20.] The following from the Board of Scientific Societies is of like nature.

> In all schools in which education is normally continued up to or beyond the age of sixteen, and in other schools so far as circumstances permit, the curriculum up to about the age of sixteen should be general and not specialised. [110, 22.]

And from the Classical Association

> "That premature specialisation in any particular study is contrary to the public advantage, as well as to the best interest of that study itself and of its students." [110, 30.]

Kenyon himself adds the statement that "it is not a little that the organizations which represent all the principal subjects of education, whether scientific or humanistic, should agree in deprecating early specialisation, and should recognize the importance of opening the doors of all subjects to all pupils, and facilitating their entrance into the paths most suitable for them." [110, 23–24.]

The educational writers are almost without exception in favor of postponing specialisation to a comparatively mature age.[1] Mr. Fisher, President of the Board of Education, is one of this number. "It is a mistake," he says, "to be too specific, and they (the trade unions) must rid themselves of the fallacy of the particular end." [203, January 10, 1918, p. 14.]

The English are especially insistent that whatever else may happen no specialisation for vocational purposes shall take place early in the pupil's school career. A typical attitude is to be found in the following statement by Sir J. D. McClure:

> It follows that for the majority at least, exclusive or excessive specialisation in training—vocational or otherwise—so far from being an advantage is a positive drawback: for, as we have seen, a large proportion of our youth manifest no marked bent in any particular direction, and of those who do but a small proportion are capable of that hypertrophy which the highest specialisation demands.
>
> It is important to remember that, though school life is a preparation for practical life, vocational education ought not to begin until a compara-

[1] Among them are Bishop Frodsam, *Nineteenth Century*, Vol. 78, p. 948. Sir James Yoxall, M. B., *Times Educational Supplement*, August 16, 1917, pp. 315–316 and 321, and Sir Oliver L. Lodge, the *School World*, February 1916, p. 57.

tively late stage in a boy's career, if indeed it begins at all while he remains at school. On this it would seem that all professional bodies are agreed; . . . the evils of premature specialisation are too well known to require even enumeration, and they are increased rather than diminished if that premature specialisation is vocational. The importance of technical training whereby a man is enabled rightly to use the hours of work can hardly be exaggerated, but the value of his work, his worth to his fellows, and his rank in the scale of manhood depend, to at least an equal degree, upon the way in which he spends his hours of leisure. [15, 201–02.]

J. H. Badley says that "it is now commonly admitted that any special technical training of whatever kind is of little use before the age of sixteen." [8, 18.] He thinks that there should be a general course for all alike, "whatever line they are to follow later." [8, 120.]

The head of a great business concern, quoted in Benson's *Cambridge Essays on Education*, thinks that "specialised education at school is of no practical value. There is ample time after a boy has started business to acquire all the technical knowledge that his brain is capable of assimilating." [15, 208.] This sounds rather positive, and Sir J. D. McClure in commenting on it says that this statement "would certainly be challenged by those schools which possess a strong well-organized engineering side for their older boys. But there would be substantial unanimity—begotten of long and often bitter experience—in favor of his plea that a sound general education up to the age of sixteen or seventeen, at any rate, is an indispensable condition of satisfactory vocational training."

In England vocational education is not considered a part of secondary education. "It has nothing to do with education, and we, as interested in education, have nothing to do with it; except indeed this: That we need vehemently to protest against such early specialisation as may develop wealth-producing capacities at the cost of dwarfing the human nature as a whole." [198, 572.]

Even in the continuation schools the first two years, that is, from the ages from fourteen to sixteen, are to be devoted to the same general purpose as that of the secondary school,—broad liberal education. A quotation from the proceedings of Parliament while the question of continuation schools was being considered will make their whole attitude toward vocational education clear. [Reported in the *Times Educational Supplement*.]

COLONEL WEDGWOOD moved an amendment to substitute "courses of education" for "courses of instruction" in the description of the work to be done by continuation schools. He said that it had hitherto been assumed in British education that the idea was to draw out the best that was in a child and to build up its character—to make an Englishman instead of a German. In this Bill was introduced an entirely different object—the production of a machine tool admirably suited to working for a master. That was a step which the House ought to hesitate to take. There were plenty of examples of this new form of education in the world. The most splendid were to be found in Germany. When it was decided that a child should be a chimney sweep, from that time its education centered around the chimney. (Laughter.) Its sums were counted with the prices of soot and the prices of sweeping chimneys. If once the country slipped into the practice of providing instruction for adolescence attempts would inevitably be made to force them into particular industries, and they would be conscribed for these industries for the rest of their lives. A step would have been taken in the direction of slavery.

MR. GOLDSTONE suggested that if the President of the Board of Education would give assurance that no scheme from a local authority would be approved if it aimed at a directly vocational type of education the honourable and gallant member's objections would be met.

MR. FISHER had no hesitation in giving such assurance. In fact it was already found in the rhetorical sentence at the head of the clause and it was precisely with the view of meeting the objection or misconception of the honourable and gallant member that the sentence had been inserted that the intention was to make it clear to every local authority responsible for this new type of education that the government did not desire it to be a vocational type of education, strictly and exclusively technical, and that they did desire it to be in the broadest sense of the term a humane form of education. It was a broad system, comprising literary and artistic instruction, that they desired to see continued during the period of adolescence.

SIR R. ADKINS expressed doubt whether the word "instruction" used in this connection would always receive the wide interpretation which had been given it by the President of the Board of Education.

SIR PHILIP MAGNUS contended that there was no necessity to alter the terms of the clause. The President was acting wisely in not attempting to define precisely the kind of instruction which might be given in continuation schools.

CAPTAIN SIR C. BATHURST said he viewed with some alarm the trend of the discussion. If education of young persons between the ages of fourteen and eighteen years were to have no relation to their future employment, the continuation schools would be condemned throughout the rural areas.

MR. RAWLINSON urged that care should be taken not to continue the education of a boy until he became eighteen years old in such a way as to

unfit him for the occupation which he wished to follow after he reached that age.

MR. RAFFAN said the Bill would fall lamentably if the opportunity were not given to the working classes to acquire a real interest in literature, science and art.

MR. J. R. MACDONALD urged Mr. Fisher to give some sort of guarantee that the instruction should be of such a nature that the workman starting life in the factory might emerge into a much wider and perhaps a more useful world.

MR. FISHER hoped that the members would rid themselves of the impression that there was necessary antagonism between vocational education and liberal education. He admitted that there were illiberal forms of vocational training, but it would be the duty of the Board of Education that it make no appearance in the continuation schools. But they should be foolish were they to arrange a system which paid no attention at any stage of a four years' course to the occupation which the boy or girl was to follow. (Hear, hear.) He did not think that was a course which would be welcomed by the working classes. It would not be to the interest of an educated democracy that there should be no connection between the education they were seeking in the schools and the lives they were to live. At the same time he felt that education should be a great liberating force, that it should provide compensation against the sordid monotony which attached to so much of the industrial life of the country by lifting the workers to a more elevated and purer atmosphere, and the Board would be false to the purpose for which the Bill was framed if it were to sanction a system in the continuation schools in which due attention was not paid to the liberal aspects of education. (Hear, hear.)

SIR J. YOXALL said that if the phrase in the clause was made "courses of instruction and education" the object of the supporters of the amendment, that boys and girls in the continuation schools should not have to give all their time to technical instruction would be secured.

LIEUTENANT-COLONEL SIR R. WILLIAMS thought that in the light of the discussion the local authorities might be trusted to frame schemes in which the two aspects of education would be blended and that it was not necessary to press the amendment to a division. [203; May 9, 1918, p. 194.]

The statements by Captain Sir C. Bathurst and Mr. Rawlinson were one of only two instances that seemed to be opposed to the postponement of specialisation. The other appeared in the *Times Educational Supplement* [203, March 7, 1918, p. 107]. "Boys and girls will never be trained to be good members of society unless they are trained to be good at their jobs." [203, March 7, 1918, p. 107.]

The Abolition of Sides. The postponement of specialisation will necessitate a change in attitude toward the division of the school into Sides. That such a division has not given satisfaction is stated by numerous writers. Benson's ideas are emphatic: "The opposition that has in modern times been set up between science on the one hand and a jumble of studies labeled either literature or humanistic studies on the other is to my mind wholly unfounded in the nature of things and destructive of any liberal view of education." [15, 103–04.]

Among the educational magazines the *Times Educational Supplement* has been most outspoken in opposition to the continuance of Sides. It says: "It can be maintained that the division of our schools into classical and modern sides has worked for ill rather than for good. . . . At present, owing to our custom of separating the sides, boys leave school with a feeling approaching contempt for those who have not been taught on the same lines." [203, October 26, 1916, p. 186.] The *Times* thinks that we might "have the ground work of a liberal education and secure variety without destroying unity." It again states that "general education would be benefited by there being no division of schools into sides at the 12 to 16 stage." [203, April 18, 1918, p. 165.]

One of the "conclusions" of the Committee on the Position of Modern Languages in the Educational System of Great Britain [43, 62] expresses the same opinion: "We consider the division of schools below the stage of the First School certificate into Classical and Modern Sides to be unsound in principle and it does not appear to have been successful in practice."[1] In the body of the report the reason for this recommendation is given: "Modern Sides, however, have been established as a half-hearted concession to a half-hearted public demand. . . . We welcome a hint conveyed to us by an eminent headmaster that some of his profession were anxious to abolish all separation of Sides up to the time of the First School Examination and have heard with satisfaction that in at least four important Public Schools the organization has been modified so as to discontinue the sharp differentiation of the school into Classical and Modern Sides." [43, 38.]

The Committee on the Position of Science in the Educational

[1] There was a minority report on this point objecting to the recommendation that this division is wrong.

System of Great Britain also gives a similar opinion: "In our view it is a very real defect in public school organization that boys should in many schools have to make their choice between a classical side in which science is almost wholly neglected and a modern side in which the general educational conditions are in many ways unfavorable. . . . Many of the ablest boys who enter the public schools pass on to the universities ignorant of science and with little or no idea of its importance as a factor in the progress of civilization or its influence on human thought." [203, April 18, 1918, p. 165.] It thinks that the beneficial consequence of the establishment of a general course for all boys up to the age of about 16 would be the abolition of the existing division into sides now so usual in the larger schools.

With individual educators all in favor of a broad general type of education, with the educational journals in favor of it, with various committees and associations supporting the movement, and practically no opposition to it, it seems safe to conclude that this type of education is sure to be the policy of the secondary school in England. In fact, it can be safely said that to no educational problem with the exception of the Recent Education Act, have the English educators devoted so much thought and attention as to a reorganization of secondary education on this line.

To secure unity and sequence the English are willing to limit the number of subjects and to concentrate upon them. In fact, some of their writers feel a need for some kind of synthesis to bring the various fields together. Kenyon says: (110, 5, footnote) "Indeed, it is the main object of the movement recorded in this pamphlet to secure this fusion of science and humanism," and Hobhouse over twenty years ago saw a need for something like this. At that time he said: "So far from seeing our way to a near or distant synthesis we are more distracted than ever when we turn from science to philosophy. Instead of uniting the sciences, philosophy threatens to become a separate and even a hostile doctrine." The *Times Educational Supplement* after quoting this statement with evident commendation added that Hobhouse "is not without hope of a synthesis yet to be wrought." [203, October 17, 1918, p. 441.] This is taken to mean that a program of studies should be so organized as to secure both diversity and unity.

During the war other writers expressed similar ideas, such as, "concentration is needed," [173, February 1918, p. 58] and " a limitation of studies is long overdue," [14, Benson: 1293]. A writer in the *School World* [173, February 1915, p. 51] is of the opinion that "premature specialisation is anathema," but is not "sure that a little knowledge of many things is not very much more dangerous." It was the opinion of the Committee on the Position of Modern Languages in the Educational System of Great Britain that the exaggerated importance attached to a "multiplicity of languages is prejudicial to the preparatory schools and to the public schools that depend on them." [43, 39.] This committee recommends that fewer languages be taught to the majority of students in the secondary schools; that "three languages are too many for a high majority; two languages are too many for a considerable proportion. . . . Each individual should only take so many as he can hope to bring to a worthy measure of fruition." [43, 39.] The foreign languages upon which emphasis should be placed are French, and when a second language is taken, always Latin.

The subjects upon which the pupil is to concentrate his attention according to the Regulations for Secondary Schools for 1918 are: (1) English, (2) Languages other than English, (3) History and Geography, (4) Mathematics and Science, (5) Art and Manual Training. This program the English consider sufficient in scope to secure a desirable diversity, and at the same time not too extensive to prohibit pupils from becoming familiar with a large part of the program of studies, thus securing unity in the pupil's individual program. By not having a too extensive program the pupils are not as likely to be divided into social classes; but it is a question whether the English program is sufficient for differences in individual capacities and aptitudes. An American educator would certainly consider this a bookish type of education, and, consequently, a specialised curriculum, none the less. Dewey, for instance, in speaking of the program that has characterized education in the past, says: [57, 24] "It is our present education which is highly specialised, one-sided and narrow. . . . It is something which appeals for the most part simply to the intellectual aspects of our natures." It is true that Art and Manual Training are a part of the curriculum, but nevertheless the bookish and academic phases seem to predominate.

From the preceding it seems that the dominating principle by which the program of studies has taken place in England has been that of subjects of study. No apparent attempt has been made to recognize dominant interests and needs of groups of pupils and the selection of subject-matter based on these objectives. In other words it is the unifying and not the specialising function that the English stress.

Curriculum Organization in the United States

Early Manifestation of Differentiation in the United States. The attempt to solve the problems of the curriculum has had a much more varied history in the United States than in England. American educators have given much greater attention to the elements of differentiation and diversification than have the English. This tendency was early manifested in the academy movement, Franklin's Academy being established with three schools, a Latin School, an English School, and a Mathematical School, to which was added later a Philosophical School. [94, 662.] A Classical department and an English department were in operation in the Phillips Academy at Andover in 1818. [94, 662.] These facts lead Inglis to state that "at least to the extent of somewhat separate classical and English departments and sometimes separate departments or schools for boys and girls, curriculum differentiation became common in the academy at a relatively early date." [94, 662.] It is known that a very wide diversity of subjects was offered in the academies before 1850. Monroe [133, 58] mentions seventy-two subjects as having been reported to the regents of the University of the State of New York by the academies in that state in 1837. To what extent the programs of these academies were to be found in actual practice and to what extent they were merely paper curriculums is not known, but certainly the demand for a diversity of subjects was early recognized.

With the establishment of the high school the "tendency toward differentiation was first manifested not by offering different curriculums in the same school but by establishing separate schools for different groups of pupils." [94, 662.] In at least one state, Massachusetts, this tendency was checked by law very early in the high school movement, as the law of 1827 tended to establish public high schools in which somewhat differentiated

curriculums were provided. [94, 663.] Separate courses were at first offered only for those pupils going and not going to college, or for boys and girls. It was much later that differentiation was made on the basis of the varying forms of higher education for which pupils were preparing or the varying types of postscholastic destinies of groups of pupils.

Inglis finds [94, 677] that "in the history of the high schools during the past half century there is observable a tendency to swing alternately from the one extreme of rigidity in curriculum organization to the other extreme of almost entire flexibility and back again." It is certain that the differentiating function seems to have been less well developed fifty years ago than it was in the early period of the academy movement and much less so than it is today. Fifty years ago, when Eliot became president of Harvard only slight flexibility was offered even to upper classmen in college. At that time all students, even college students, were expected to pursue the same subjects, there being one rigid curriculum for all. Then followed as the result of an attempt to break away from this rigid uniformity a period of rapid development of the free elective system. Begun at Harvard under Ex-President Eliot it was first applied to juniors and seniors in college, then extended to freshmen and sophomores, then to the high school, and finally to the seventh and eighth grades of the elementary school.

The movement toward the free election of studies was influenced by several distinct factors some within and some without the school. Without the school the industrial revolution demanding a much more extensive division of labor; the advance of scientific investigations, numerous inventions leading to labor-saving devices; increasing international relationships caused the introduction of many new subjects of study into the program of studies. The natural sciences, the modern languages, history and the social sciences and later the vocational and practical arts subjects were the most prominent among these. The question of the relative values of the various subjects of study, "what knowledge is of most worth?" developing into bitter departmental controversies, remained perhaps the most prominent question of the curriculum for a quarter of a century or more. These controversies ended in a more or less unstable truce, the basis of which was the free election of studies.

If the question occurred to anyone as to why the program of studies should not undergo a comprehensive reorganization under a new conception of the function and meaning of secondary education in a democracy, a conception which should include the demands of contemporary life, industrial, economic and social, it was not given sufficient consideration to be put into practice. The result has been that the vying of the various subjects with each other for position and amount of pupil-time have virtually retarded curriculum development. "Most of the controversies and most of the constructive proposals for introductory science even in the high school have reflected the dominant special interest of the author in his specialty and reflected little curriculum thinking. The same thing in exaggerated form is evident in college curriculum framing. It has here practically always been a fight of departmental interests, with a resulting compromise." [97, 590.]

Possibly because no one thought of a comprehensive reorganization or because the older subjects were too firmly established in the program of studies to be displaced at once, educational reformers could not proceed according to such a program of comprehensive reorganization. They could only proceed by the addition of new subjects one by one, and whenever opportunity offered, by the elimination of those subjects that had outlived their usefulness. As the addition of new subjects was far more frequent than the elimination of old ones, the curriculum soon became overcrowded and confusion in organization was the result.

The extent to which differentiation and diversification has been carried in the United States can be seen from the following facts: Snedden mentions [182, 968–9] thirty-eight possible subjects for the junior high school. Calvin O. Davis [53, 63] found twenty-eight subjects in the high schools of Los Angeles that "are rarely found in other cities" in addition to the subjects ordinarily found elsewhere. He thinks that the scope of the work offered in Los Angeles "doubtless surpasses every other city in America." [53, 63.] Every student has to begin with a choice among six different types of schools. Then "within each school the work is further differentiated and organized into parallel courses. The number of these courses is large aggregating in the six high schools, sixty-six. . . . Flexibility is further secured by permitting

within each of the sixty-six courses and in each of the four years work outlined therein a goodly number of alternative choices." [53, 63.][1]

Aurner found [3a, 368] that in the State of Iowa taken as a whole the number of different curriculums in the various schools had developed "from a single unqualified rigid curriculum to three, five, eight, or even twelve lines of study." This is probably a fair representation of the other states in the union.

Some prominent superintendents think that there should be as many curriculums as there are children. For instance, Superintendent Spaulding, Cleveland, Ohio, [217, 309] says that "in practice there should be as many 'courses' (curriculums) as there are children." Newlon [141, 254] does not go so far as this but says that "in theory" such should be the case. It is very probable, however, that neither of these men really expect or wish that there be 883 curriculums for 883 pupils but that there might be a natural grouping of pupils into a dozen or so groups according to their predominant interests and needs.

The rapid growth of democracy has found us unprepared for the corresponding educational obligations and we have not known what to do, what to include in the curriculum and what to omit, what to require of all and what to make elective, which students should take this subject and which should take that. We have not known whether or not it made any difference what a person studies so long as he studies something. American educators have become so enamoured at times of the movement toward an enriched curriculum that they have thrown the unifying elements of the curriculum to the winds and have completely lost sight of any kind of orderly sequence. Since we have not known what else to do the whole burden has at times been thrown upon the student and almost complete election has been allowed in some places. "One president of a great university recently went so far as to say publicly that he had no faith in the integrity of college faculty curriculum-making—that he'd rather trust the student's election." [97, 590.] The result of all this has been endless confusion and as Dewey states, "In the multitude of educations education is forgotten." [56, 288.] At least curriculum making has reached a stage where an effort to coördinate,

[1] "Course" is here used in the sense of "curriculum" defined at the beginning of this chapter.

correlate and unify is urgently necessary, if the educational machinery is to function smoothly and harmoniously.

The elective system in practice developed many serious defects, the main ones being that it provided no means by which sequence within each subject of study and unity among the several subjects of study might surely be attained. Such sequence and unity might be attained but there was no certainty of it. As a matter of fact when the individual pupil was considered there was no certainty of anything. When the number of subjects announced in the printed programs was investigated it was apparent that it was possible for most students to secure both a rich and a unified program. When, however, in practice the actual curriculums of individual pupils were examined every conceivable kind of program was found from one extreme of a narrow specialisation and isolation, on the one hand, to a smattering of many subjects, on the other, both of which were equally fatal to the very idea of education.

In finding a way out of the difficulty the United States at first hit upon differentiation by groups of studies, dividing the whole program of studies into some such groups, as, the language group, the natural science group, the social science group, etc. To secure both sequence and diversity Newlon proposes to require of all students, "in four distinct subjects or departments, two majors of three units each and two minors of two units each. This system, copied from the colleges, insures that the four years work done by the student will have organization and that he will pursue certain studies long enough to obtain mastery of them. It also insures that he will have that diversity of training which is so necessary to anything that is to be called culture." [141, 259–60.]

The Committee of Ten recommended four curriculums, the Classical, the Latin-Scientific, the Modern Language and the English. The basis of differentiation was here plainly that of dominant subjects rather than the activities of life to which pupils would apply their training. The attack on the doctrine of formal discipline greatly accelerated the tendencies to inquire into the relative values of subjects, but it did not change the basis of differentiation. It was subject matter still.

Differentiation by free election and differentiation by the group system had each been on the basis of subject matter rather than individual needs and post-scholastic destinies. However, the in-

creasing knowledge of the importance of individual differences in education has caused the basis of differentiation to be changed from the former to the latter. That the requirements of individual differences may be met is the real reason for differentiated curriculums. The growing realization of the meaning of democracy has made it clear that "equally open to all" without carefully providing for individual needs is not democratic. "Take it or leave it" has driven many away from the schools and left some within the schools undeveloped and unprovided for. It has become evident that democracy demands not the same for all but that each individual child should, if possible, have that particular kind of training that will best develop his aptitudes and capacities, both individual and social.

The New Basis for the Organization of the Curriculum. The philosophy of education in the United States is pragmatic, that is, it conceives certain ends which it thinks desirable to attain and attempts to find the necessary means of obtaining them. Consequently, American educators have discontinued the practice of describing educational aims in terms of mastery of subject matter; rather they tend at present to set up specific objectives which they think the secondary schools of the nation should attain. Thus the Commission on the Reorganization of Secondary Education sets up seven specific objectives which they hold "should constitute the principal aims of education." [42, 11.] These objectives are not expressed in terms of subject matter but in terms of concrete social utilities. Subject matter is not disregarded, but mastery of subject matter is no longer an end in itself but is considered merely as a means to the attainment of the objectives of education. The objectives which the Commission recommends are: Worthy home membership, vocation, citizenship, leisure, health, command of fundamental processes, ethical character. [42, 10–11.]

The reason assigned for this mode of approach is as follows: [42, 27] "The objectives must determine the organization, or else the organization will determine the objectives. If the only basis upon which a high school is organized is that of the subjects of study, each department being devoted to some particular subject, there will result an over-valuation of the importance of subjects as such, and the tendency will be for each teacher to regard his function as merely that of leading the pupils to master a partic-

ular subject, rather than that of using the subjects of study and the activities of the school as means for achieving the objectives of education."

In attaining the objectives mentioned above pupils may in many respects be treated alike. This is true to a considerable extent of worthy home membership, citizenship, health, command of fundamental processes, and ethical character. A pupil should have attainments in each of these aims whatever his vocation may be, but as soon as the "vocation" objective is accepted as a valid aim in secondary education it is at once realized that it is impossible to treat all pupils alike. Therefore, the American educators have recognized that both a "specialising" and a "unifying" function are necessary in secondary education.[1]

The Specialising Function in Secondary Education. In providing for specialisation American educators boldly depart from the tradition of the past and recognize that preparation for vocations is a valid aim in secondary education. They tend to make the vocational motive the basis of differentiation. "The basis of differentiation should be in the broad sense of the term vocational, says the Commission on Reorganization of Secondary Education, [42, 22] but it does not forget the necessity of providing for other objectives than that of vocational efficiency. Inglis agrees [94, 671] that "curriculum differentiation is determined primarily by the probable future activities of pupils, especially along vocational lines," but he also recognizes the "desirability of not anticipating too much the decision of vocational and other choices." [94, 679.] And Johnston says [97, 579]: "On general principles which I am prepared to defend I lay down the proposition that curriculum differentiation is necessary wherever possible in high schools, and that the basis for such differentiation must be the demands of the different groups of our high-school pupil bodies, these groups partially segregated on the basis of their different vocational needs and expectations." As the question of vocational differentiation is attracting so much attention at present a more extensive treatment will be given in the following chapter.

Differentiation according to the new conception of curriculum organization is based on the demands of each of the different

[1] This is the terminology used by the Commission on the Reorganization of Secondary Education. Inglis uses the terms "differentiation" and "integration" respectively.

groups of high school pupil bodies. The Commission on the Reorganization of Secondary Education states [42, 21]: "Secondary education in the past has met the needs of only a few groups. The growing recognition that progress in our American democracy depends in no small measure upon adequate provision for specialisation in many fields is the chief cause leading to the present reorganization of secondary education. Only through attention to the needs of various groups of individuals as shown by aptitudes, abilities, and aspirations can the secondary school secure from each pupil his best efforts. The school must capitalize the dominant interest that each boy and girl has at the time and direct that interest as wisely as possible. This is the surest method by which hard and effective work may be obtained from each pupil."

Inglis [94, 677] is of similar opinion: "Individual differences among pupils in capacities, acquired abilities, interests, and futures are the primary factor determining variables in secondary-school studies. To ignore their existence and the character of their distribution is to come directly into conflict with nature. Nevertheless dominant differences only can be considered, since the effective and economical administration of curriculums demands that a sufficiently large group of pupils having somewhat similar capacities, abilities, interests, and probable futures be afforded to justify the formation of classes for instruction in any subject. Within the limits of effective and economical administration the number and kinds of variables introduced into secondary-school curriculums should be as large and diversified as possible. Any subject of study which meets the needs of a sufficiently large number of pupils to permit effective organization of classes and which possesses educational value is justified in the secondary school."

For the old academic basis, Johnston thinks that [97, 579] "we must substitute the principle of designing courses and curriculums according to whether they have or do not have systematized information and definite trainings. We must know, in a given case, which of these knowledges and trainings are requisite for and common to the life demands of the majority in each of the groups into which we can, for this curriculum purpose, break up our particular bodies of high-school pupils. . . . Many modern writers do not see this era of curriculum differentiation that is upon us."

It is probable that Spaulding and Newlon who were quoted above to the effect that there should be as many curriculums as there are pupils do not really mean that there should be a separate and distinct curriculum for each pupil but that each pupil should have the opportunity of pursuing without serious limitations the lines of study that seem best adapted to his particular interests and aptitudes. It is only a question of providing for individual differences. In practice, even if their ideal should literally be carried into effect many of these curriculums would doubtless be identical and pupils would be grouped according to certain dominant interests. In fact, Spaulding has more recently said: [190, 563] "We are hearing a good deal in these days about the importance of morale in our industrial and civic life and we are noting the steps taken to produce morale. It means common knowledge about certain things, common ideals, and common purposes." [Cf. 97, 587.]

Newlon also describes his plan in such a way that one surmises that he does not think that absolute differentiation for all pupils would be desirable. "It was decided," he says [141, 259], "that there were three large groups of students in the high school whose needs must be met by the program of studies; the college preparatory group, the vocational group, and that large group of students that would not enter college and did not for good reasons care to prepare for definite vocations, but desired a general liberal arts training in the high school."

Groups into Which High School Pupil Bodies are Divided. The groups into which high school pupils may be divided as mentioned by Newlon were further subdivided and for each group a special curriculum was devised. One was to prepare for college and one for normal school. "Likewise a number of vocational curriculums was worked out, such as the household arts, including the sewing and cooking curriculums; the mechanic arts, including the wood-working and the iron working curriculums; the commercial including the stenographic and the book-keeping curriculums; the music curriculum; the fine arts curriculum; the agriculture curriculum, and the teacher training curriculum. The general curriculum, poorly named perhaps, was planned for those students who do not care to enroll in any of the vocational curriculums and do not care to take the mathematics or languages required in the college preparatory curriculums. My experience in administer-

ing the group system has convinced me that this is a very real and definite student group. In all fifteen curriculums choices were offered the students."

The Commission on the Reorganization of Secondary Education mentions a similar list, though it does not pretend to make its list complete. It mentions "agricultural, business, clerical, industrial, fine-arts, and household-arts curriculums." [42, 22.] "Provision should be made also," states the Commission, "for those having distinctively academic interests and needs."

Inglis would accept such a grouping of pupils, it seems, but he makes also a number of groups on another basis, that of the probable stay of the pupil in school. "It must be recognized," he says, "that the factor of elimination vitally affects the organization of curriculums in two important respects: (*a*) provision must be made by the organization of flexible curriculums, the introduction of varied forms of education, and the proper administration of the diagnostic function, which will encourage continuance in the secondary school longer of pupils who now leave school in large numbers; (*b*) provision must be made for an education as effective as possible, as appropriate as possible, and as well rounded-out as possible for pupils who must leave school before the completion of the course." [94, 672.]

Inglis' complete classification includes the following [94, 672–4]: 1. Those who will continue their education beyond the secondary school in some higher institution. 2. Those who will complete the secondary school course but close their formal education at that point. 3. Those who remain in school until the close of the eleventh grade but who leave school at that point. 4. Those who remain in school through the tenth grade but who leave at that point. 5. Those who at present receive but one year (or less) of high-school education. 6. Where the junior-senior high school organization is in operation there must be considered in the organization of curriculums the fact that about two fifths of the pupils entering the seventh grade never proceed (under present conditions) as far as the ninth grade. Curriculums must be organized for the purpose of retaining those pupils at least through the ninth grade and for the purpose of providing curriculums as effective as possible for those who must leave at the close of the junior high school.

Flexibility in the Junior High School; Rigidity in the Senior High

School. That pupils may not rush prematurely into specialisation and that they may select as wisely as possible their lines of specialisation when they do decide, Inglis proposes that curriculum organization in the junior high school should be characterized by a high degree of flexibility with a corresponding degree of rigidity in the senior high school. "All things considered," he says [94, 679], "it would appear to be reasonable that curriculums should be characterized by a relatively high degree of flexibility in the early grades of the secondary school, by a relatively high degree of rigidity in the later grades, and by a gradual transition from the one status to the other. Such a practice would recognize in the early grades of the secondary school (*a*) the desirability of a relatively wide range of subject matter favorable to educational diagnosis, prognosis, and guidance—themselves conducive to the possibility of greater definiteness in later work; (*b*) the desirability of not anticipating too much the decision of vocational or other choices; and (*c*) the desirabililty of permitting as much adaptation to individual differences as may be practicable. At the same time it would recognize in the later grades of the school the desirability of definitely determined vocational work, the necessity for specialisation and concentration along definite lines, and definite propaedeutic training for those whose education will continue beyond the secondary school. It would further recognize that in the later grades of the secondary school groups of pupils may more readily be classified and their special needs determined."

The Commission on the Reorganization of Secondary Education agree that the early years should be exploratory in nature. "In the seventh year," it says [42, 23–24], "that is the first year of the junior high school, the pupil should not be required to choose at the outset the field to which he will devote himself. For those who do not at this time have a definite purpose, opportunity should be given to gain some experience with several significant types of work, such as some form of industrial arts, gardening or other agricultural activity, typewriting or problems drawn from business, household arts for girls, and for at least a part of the pupils some work in a foreign language. It may be found feasible to organize several such subjects or projects into short units and to arrange the schedule so that every pupil may take several of them. The work thus offered may and should be of real educational value, in addition to its exploratory value."

We have already seen that during the latter part of the nineteenth century curriculums were rather loosely administered and in some cases all lines of curriculum demarcation were practically nominal. Inglis finds [94, 677–8] that "with the recent change in the basis of curriculum differentiations from subject-matter to individual needs and post-scholastic destinies there has been developed a tendency to organize rather definitely separated curriculums which permit a relatively small amount of overlapping or cross-cutting."

Aurner [3a, 369] found a wide diversity of practice with regard to rigidity and flexibility in Iowa. Although in some places there was much "that was elective," in others "the different groups were elective, but within each group little that was elective." He cites two school systems as extremes: "At Albia it is noted that only ten credits[1] were required—six in English and four in mathematics —in 1911, the remaining twenty-two being wholly elective. On the other hand, an announcement from Boone shows requirements varying from eleven to twenty-five credits depending upon the course pursued, there being five courses as follows: the Latin course, twenty-five credits required; the scientific course, twenty-five; the history course, twenty-four credits; the commercial course, twenty-one credits."

Educational Guidance. It is clear that without advice in selecting curriculums the pupil would be guided to a large extent by his likes and dislikes, or the likes and dislikes of another, sometimes mere whims in either case. Even if the pupil alone did sincerely try to select his curriculum wisely he might fail due to insufficient knowledge of his own aptitudes and needs, or of the nature of the subjects of study which constitute his possibilities of selection. For this reason, those who advocate the new basis of curriculum organization propose that there shall be a system of educational guidance as an integral part of the organization. This guidance consists of two parts, (*a*) a wide variety of contacts and experiences, (*b*) advice and council from older people, parents and teachers. "All educational guidance," says Inglis [94, 717], "is primarily and fundamentally a matter of providing a wide variety of educational contacts and experiences so organized as to meet the needs of individual differences and to afford a basis of actual

[1] "Credit" is here equivalent to one subject pursued for one semester, five hours a week.

experience for the intelligent selection of vocation and avocation, for the determination of moral and social conduct, and for the wise choice of educational offerings. The older conception of guidance involved primarily a system of educational advice (in some cases what practically amounted to educational compulsion) with particular reference to the selection of a vocation. The newer conception of guidance involves primarily a system of educational experiences designed to permit the pupil to explore, try out, and thus gain some understanding of his own capacities, aptitudes, and interests, to open up to the pupil's view the opportunities of life and of education, and, as far as possible, to make him acquainted with the privileges, demands, and responsibilities of life in its various phases, vocational and avocational, social, civic, and moral. Only when such a basis of experience is provided can any system of guidance by advice be safe or effective."

The Commission on Reorganization of Secondary Education accepts this position and adds [42, 21] that the pupil's decision should not be imposed on him by others. "Especially in the junior high school the pupil should have a variety of experiences and contacts in order that he may explore his own capacities and aptitudes. Through a system of educational supervision or guidance he should be helped to determine his education and his vocation. These decisions should not be imposed upon him by others." Educational guidance is the crux of the whole program of differentiated curriculums. There is no doubt that with an enriched curriculum and expert guidance individual differences may much more effectively be cared for, but when guidance breaks down there is no telling what may happen. This was the chief defect of the elective system, and it will be the chief defect of any system.

The Unifying Function in Secondary Education. American educators recognize a unifying function as well as a specialising function. They by no means think that the differentiating function should comprise the whole of the field of secondary education. "With increasing specialisation in any society comes a corresponding necessity for increased attention to unification. So in the secondary school, increased attention to specialisation calls for more purposeful plans for unification. When there was but little differentiation in the work within the secondary school, and the pupils in attendance were less diversified as to their heredity and

interests, social unification in the full sense of the term could not take place." [42, 23.] The Commission, therefore, consider that specialisation and unification are supplementary functions and by no means antagonistic to each other, but that each promotes the other.

The Commission thinks that the United States is especially in need of a unifying function because of its diversity of racial stocks. "In some countries a common heredity, a strongly centralized government and an established religion contribute to social solidarity. In America, racial stocks are widely diversified, various forms of social heredity come into conflict, differing religious beliefs do not always make for unification, and the members of different vocations often fail to recognize the interests that they have in common with others. The school is the one agency that may be controlled definitely and consciously by our democracy for the purpose of unifying its people. In this process the secondary school must play an important part because the elementary school with its immature pupils cannot alone develop the common knowledge, common ideals, and common interests essential to American democracy. Furthermore, children of immigrant parents attend the secondary school in large and increasing numbers; secondary education comes at a stage in the development of boys and girls when social interests develop rapidly; and from the secondary school the majority of pupils pass directly into participation in the activities of our society." [42, 22–23.]

Provision for unification may be made in several ways. (*a*) There may be certain studies to be taken by all or nearly all pupils. These are called *constants* or *common elements* or taken altogether the *Core curriculum*, and "should be determined mainly by the objectives of health, command of fundamental processes, worthy home membership, citizenship and ethical character." [42, 23.] Whatever differentiation takes place should be over and above these constants.

Inglis suggests [94, 676] the following as constants in the curriculum of the secondary school. "(*a*) English throughout the junior and senior high schools; (*b*) some social science in each grade of the junior and senior high schools; (*c*) health study throughout the junior high school in some form, physical training through exercise in all grades of the secondary school; (*d*) 'general science' in the junior high school; musical appreciation in the

junior high school. These should be considered as irreducible minima in the group of constants."

To secure both sequence and diversity Newlon proposes to require of all students "three years of English, one year of medieval and modern history, one-half year of civics or one year of American history, one year of science, one-half year of physical education, and one half year chorus." [141, 260.]

From the foregoing it can be seen that the American plan of curriculum organization is made up of three parts. (*a*) *Constants*, to be taken by all or nearly all pupils. (*b*) *Curriculum variables*, peculiar to a curriculum or to a group of related curriculums. (*c*) *Free electives*, to be taken by pupils in accordance with individual aptitudes or special interests, generally of a nonvocational nature. [42, 23.]

Minimum Essentials. There is a group of educators in the United States, however, of whom Bagley seems to be the chief spokesman who think, if anything, this overlapping of curriculums does not go far enough, and the uniformity which it secures "will be determined merely by convenience, not by basic and fundamental principles." [7, 959.] Consequently, this school of educators advocates a scheme by which the "common elements" or "minimum essentials" shall constitute the basis on which to build a curriculum. Whatever can be accomplished more than this may be open to free election, but first and foremost the minimum essentials should be provided for.

Bagley thinks that it makes a difference whether all the people of the country can think together and act together. Consequently, common elements are not only justified but they are demanded, "by social needs, and particularly by the needs of a democracy." [6, December, 1914.] For "democracy depends upon social solidarity,—it depends upon a certain community of ideas, standards, ideals, and aspirations among all members of the democratic society, and it is this necessity that lies at the basis of uniformity in the program of a democratic system." [6, December, 1914.]

It may be said that the fundamental tenets of those who advocate common elements are summed up in the words, "common ideas, standards, ideals, and aspirations." Bagley realizes that both differentiation and unity should be secured but he thinks that desirable differentiation will be promoted by intelligent uniformity. [6, December, 1914.]

Judd, in a joint article with Bagley, agrees with these main principles [101, 318]. "It is the business of a democratic society to see to it that the materials of thought which are presented to children shall contain enough common elements so that the thinking of the community as a whole shall be guided along similar lines. A school which gives to one class of children one set of ideas and ideals and to another class an entirely different set of ideas and ideals will make for social distinctions that are dangerous in a democracy. On the other hand, a course of study which knows no variations is quite as dangerous in a democracy as the stratifying course."

The system advocated by Bagley does not seem very dissimilar from that of Inglis and the Commission on Reorganization of Secondary Education. Perhaps the sole difference is in point of emphasis. One group emphasizes the differentiating function, the other the unifying function.

There are still other indications than those already mentioned that the United States is looking more toward sequence and unity than in the latter part of the nineteenth century. Some of these may be mentioned. There are certain courses of recent development in which the unifying purpose is stressed. An instance of this is the recent action of the Columbia University Faculty in establishing a composite course of the elements of the social science group. This course will consist of parts of sociology, political science, history and economics intended as a general information course. It will be a five-hours a week course throughout the year and required of all freshmen. It is said that other departments in Columbia are contemplating similar rearrangement. It has been recognized that a system in which every teacher thinks that his subject is of prime importance and either cares nothing for the subjects of the other teachers or at least makes no effort to strengthen the relation between his department and others—in such a system the education of the student is lost sight of and may become a mere patchwork, uncoördinated and incomplete.

This movement is paralleled in the high school by the strong movement toward general science, unified mathematics, and the proposed unit courses in social science. For instance, a course for high school pupils similar to the course just referred to in Columbia has been proposed. [114, 37–41.] This course called

Study of Nations "should be taken by all and not offered merely as an elective." [114, 39.]

The reorganization of the early science courses is taking place, a "general" course being given in which the unifying element is human life itself and the relation of science to it. The courses at first will not be divided off into water-tight compartments, as in the past. The proposed courses in "unified" mathematics have the same purpose, and utilize whatever portions of the whole field of mathematics that serve this purpose, whenever the situation demands.

Recent curriculum discussions especially caused by the publication of Flexner's "The Modern School" show a tendency toward the limitation of subjects, or at least toward the formation of groups of subjects which are to constitute the curriculum for a liberally educated man. Mr. Flexner himself proposed "four main fields—science, industry, civics, and aesthetics." Mr. West, one of Mr. Flexner's most outspoken opponents, has mentioned three, the world of nature, the world of man, and the world of the intellect. In the first main field would be science and mathematics; in the second, history, civics, and economics; in the third, language and philosophy. [216a, 30–32.] President Butler has mentioned three that are similar to those of Mr. West. [33, 64-79.] It is true that each of these may be very greatly subdivided but from the content one gathers that every pupil should have a certain amount of training in each of these fields which is similar to the group system previously discussed.

From the purely philosophic side, social efficiency the professed aim of a great majority of educational thinkers at present implies that coöperation, communication and shared activites are looming large in educational philosophy, and hence narrow individualism is breaking down. This may mean that collectivism, or working together, is becoming more prominent in our educational theory. This is one fundamental reason why constants or common elements are insisted on so strongly by certain educational writers. "The fundamental issue," says Bagley [7, 964–5], "in this matter of 'differentiation' versus 'common elements,' then, is the issue between individualism and collectivism. . . . Many are asking whether in our own country we have not gone too far in the direction of individualism."

Conclusions

The English plan of curriculum organization eliminates for them certain outstanding problems which are apparent in American education. In the first place, no extensive plan of differentiated curriculums is necessary as general education is intended. It should be remembered that the English plan to secure a certain kind of diversity by a variety of schools. The English aim is to develop strength of character and not to attain certain objectives. In the second place, it settles the question of early vocational training by deferring it, or at least, by shifting the responsibility to other schools or to the industries themselves. Preparation for those vocations that require little technical and scientific training will probably be deferred till the worker enters upon his career. For those that require technical and scientific training technical schools are provided.

In both cases American opinion is different. Many specific objectives should be set up, a number of which can be attained by all pupils, but at the same time so diverse that an extensive plan of differentiation is necessary. In the second place, the United States unlike England considers vocational training even in the junior high school as a worthy and legitimate purpose for some pupils, especially those not going to higher institutions. It is a question as to whether the vocational aim should dominate a pupil's program of studies, in the high school period, even if the pupil is not going on to advanced institutions. The English would answer in the negative but American opinion seems to be divided. There is a strong feeling in the United States that unless the vocational appeal be made there will be many pupils lost to any kind of education whatsoever. A fuller discussion of the vocational tendency is given in the next chapter.

CHAPTER IV

VOCATIONAL EDUCATION IN SECONDARY SCHOOLS

The differentiation of curriculums raises the question as to what extent vocational preparation should influence the content of the curriculum. It was shown in the preceding chapter that England proposes no specialisation of any kind before the age of sixteen, and particularly no specialisation before that age for vocational purposes. In America, on the other hand, since the policy is to reach every pupil and to give that pupil the kind of education that fosters his own best development, vocational education has been put forward as a possible means of attaining these ends and accordingly it is proposed to give at least a part of this preparation in the regularly established secondary schools. The extent, however, to which it should be given is far from settled.

Widespread Vocational Education Expected by Some Writers

Some American writers are expecting a marked increase in vocational education within the secondary schools in the United States in the near future. Judd and Bagley imply a decided vocational tendency when they say [4,321]:

> There has been a tendency in recent educational discussions to assume that boys and girls always find school lessons formal and stupid unless they see clearly how these lessons may be made to bear upon the earning of money. This tendency toward economic determinism in educational theory is most unfortunate.

In a later article [99, 156] Judd finds that industrial education is making "headway at an astonishing rate"; that the vocational people,—such as the American Manufacturers Association, the National Society for the Promotion of Industrial Education, and the Federal Board of Vocational Education,—"are carrying their point at state capitol after state capitol," while "the liberal-arts minds are working without unified command, without adequate comprehension of the strength of the enemy, and without any

clear notion of how to prepare." [99, 155–6.] The following is a still stronger statement:

> There is today in our American schools throughout, a practically universal stampede away from what the older generation called the "humanities," and toward the "realien,"—toward getting "results." Today the minor educationists are frank followers of the vociferous vocational guides, who quite simply solve the whole problem of the scheme and scope of education, by reference to the Spartan king, who, on being questioned as to what a boy's education should be, replied, "I suppose he should learn as a boy, the things he would be expected to do as a man." [161, 369.]

Other writers go even further than this and express the fear that every kind of liberal education everywhere is in danger of being wiped out. It is asked whether "the vast tide of industrial democracy, surging irresistibly towards greater socialization of economic goods and increased equalization of economic opportunity will totally engulf the liberalizing spiritual forces." [119, 422.] President Butler is of the opinion that "the moral and spiritual values have been ground between the upper and nether millstones of a psychology without a soul and an economics with no vision beyond material gain" [33, 65] and some writers go even so far as to say that such teachings as those of Professor Dewey are based on a "narrow utilitarianism which would give delight to the enemies of literary or historical, or indeed of liberal studies everywhere." [31, 429.]

Some writers, therefore, seem to conceive the issue to be an exclusive choice between vocational education on the one hand, and literary subjects on the other. They seem to think that the curriculum must be dominated by either the one or the other. They fail or refuse to recognize any other alternative than classics or vocational education. For instance, the American Academy of Arts and Letters makes the issue squarely literary vs. vocational. In a resolution recently passed by this Academy [172, December 28, 1918, p. 775] the study of Latin and "wherever practical of Greek," is encouraged, both in secondary schools and in colleges, and also "the scientific study of classical antiquity in the graduate schools of our universities." The reason for passing such a resolution was that "the triumph of the opposite policies will lower the intellectual and esthetic standards of our secondary schools," and "will convert into a mere technical school or voca-

tional school the liberalizing and elevating American college." Whether or not there is any justification for the fear of an exclusive domination of secondary education by vocational education depends upon the meaning one gives to the term vocational education. If a break with tradition means vocational education, as the preceding quotation seems to imply, it is probably true that vocational education is destined to become predominant in secondary education, as it seems that modification and reorganization of ideals and practices hitherto prevailing in secondary education is the order of the day. However, if vocational education means as it is usually taken to mean, "any education, and only that education, the primary purpose of which is to prepare an individual for the successful pursuit of a recognized vocation," [189, 751] there is considerable doubt whether there is a very great probability of vocational education occupying a predominant place in the secondary curriculum in the near future.

The Opposing Forces in the Matter of Vocational Education

From the preceding discussion it is apparent that there are two camps as regards this problem of vocational education, those for and those against. The group that favors vocational education may as Dewey points out be further subdivided. There are two mighty and opposing forces concealed within the movement for vocational education, he says [59, 334], "one which would utilize the public schools primarily to turn out more efficient laborers in the present economic regime; the other which would utilize all the resources of public education to equip individuals to control their own future economic careers, and thus help on such a reorganization of industry as will change it from a feudalistic to a democratic order."

Failure to recognize these two opposing forces within the vocational group itself has caused much confusion in educational discussions. It is the first of these groups and not the second that opponents of vocational education intend to condemn so heartily, but failing to make a distinction between the two, they have deplored vocational education of every kind. The second carries with it no necessary antagonism to education in its highest and best sense. It is itself primarily educative in intent.

Facts That Seem to Favor a Predominance of Vocational Education

There are undoubtedly certain facts which when viewed alone tend to support the belief that vocational education of the first type is on the point of dominating the education of adolescents in the United States. First, vocational education is the only phase of secondary education supported by grants from the federal government. This is accomplished through the Smith-Hughes Act. The object of this Act is to equip men and women to work successfully in a trade or in home-making and the funds may be used for three purposes only: (*a*) Salaries of teachers, supervisors, or directors of agricultural education; (*b*) salaries of teachers of trades, industrial subjects, and home economics; (*c*) the training of teachers of agriculture, home economics, and vocational subjects. Not more than 20 per cent of the pupil's time may be devoted to subjects other than vocational. The friends of vocational education are hoping that this Act will give a great impetus to their cause. Since the bill carries an annual appropriation of $7,500,000 from the federal government, which amount is to be duplicated by states receiving these grants, it may eventually be of sufficient influence to place vocational education in a dominant place in the secondary school. This remains to be seen.

A second possible indication that vocational education is in danger of dominating secondary education is the fact that certain associations are making a strong plea for vocational education. Judd describes their activities as follows [99, 155]:

> The American Manufacturers' Association has had for some years past an education committee which has striven to build up in this country a new type of school—one absolutely divorced from the school that now exists. An organization called the National Society for the Promotion of Industrial Education has been aiding the American Manufacturers' Association. This society employed a secretary whose salary was paid by subscription, not by membership fees, and whose duty it was to influence state legislatures and Congress to enact laws providing for vocational courses on a liberal scale. Both the organizations mentioned have steadily refused to trust the schoolmaster of the traditional school. Both organizations have been outspoken in the charge that ordinary school teachers are conservatives to the point of stupidity, bigoted and inexperienced, blind to the needs of society and ignorant of the demands made by children's natures.

A third indication of a vocational tendency is the attitude of certain schoolmen towards it. One such states that he "believes staunchly in vocational education to a finish for everybody." [116, 11.] President Wilcox, formerly of the New York School Board, is quoted as saying that "what they ought to be learning in their schools is the cheapest way of getting their potatoes to the Chicago market" [31, 243]; and Paul Kreutzpointer, Altoona, Pa., [115, 103] deplores the fact that "the Smith-Hughes Act does not recognize the work of the junior high school as the vocational preparatory school of the future." Dr. Prosser of the Federal Vocational Education Board is of the opinion that [172, September 7, 1918, p. 179] "between the age of fourteen and twenty-one every young person who remains in school should receive under federal supervision, at least a year's training in a recognized vocation. . . . So far as possible this training should be given as a part of school or college training." Those who are not in full-time attendance at a secondary school should be given part-time instruction.

These are the only statements out of about seventy gleaned from the reading in the investigation that could at all be said to favor vocational education for everybody and it is plain from the last statement that the writer does not expect that vocational education shall occupy a major part of the time of the secondary school. The following statement [118, 103] although not exclusively vocational in intent still goes much further than most people would be willing to follow.

> But I cannot refrain from expressing the opinion that inasmuch as 74 per cent of the pupils in the United States do not reach the high school, sanity in industrial training will demand that it strike its roots deep down into the elementary school and that the result will be not only to improve the opportunities for children to adjust themselves to the demands of our present industrial situation but to give them a more genuine culture than is now possible in most public school systems. The purpose of the work which we call prevocational, which we occasionally find in the upper grades of the elementary school, will ever be the development of character, intelligence, and economic efficiency, and there is no genuine culture which lacks either one of these elements.

Later in the same article [118, 112] Leavitt says: "In fact, one might almost say that sanity in secondary education demands that the vocational motive, broadly speaking, be made dominant

throughout all courses and in nearly all subjects." This statement needs to be discounted somewhat, however, because Leavitt in speaking of The Boston Public Latin School intimates that it is dominated by a vocational motive because preparation for college is its primary purpose. If the vocational motive is as broad as this, it would perhaps be better to say that secondary education should in the broad sense be specifically designed to meet genuine life purposes. Still it seems from what is said that Leavitt favors a secondary education which is to a large extent vocational in purpose, using the term with its usual connotation.

It was claimed above that today "the minor educationists are frank followers of the vociferous vocational guides," and there is evidence to indicate that certain administrators use the vocational motive as a bid for patronage. For instance, Aurner [3a, 371–2] found that in some of the schools of Iowa a definite vocational or professional purpose dominated each curriculum. Of course it was to be expected that the commercial and industrial curriculums would have definite vocations more or less in mind but at Oskaloosa five curriculums were found, "the first of which was described under the title of Course A which it is said leads to the speaking and writing professions. In this course the major subjects are language, literature and history." Each of the other courses had special professions in mind. Course B directs attention to the scientific professions. "Course C is a general plan in which commercial subjects form the majors." Course D is the normal course and Course E is the agricultural course. Ascribing vocational purposes to these various courses, especially to the first two, seems, however, to be the merest camouflage and manoeuvering for the support of the layman with whom the vocational appeal is strong and hence a temptation to the administrator.

The Position of the Commission on the Reorganization of Secondary Education. A possible interpretation of the position of the Commission on the Reorganization of Secondary Education indicates a favorable attitude to the first kind of vocational education described by Dewey (above p. 85). They insist under the heading, "the subordination of deferred values," [42, 17] that

> Many subjects are now so organized as to be of little value unless the pupil studies them for several years. Since a large proportion of pupils leave school in each of the successive years, each subject should be so or-

ganized that the first year of work will be of definite value to those who go no further; and this principle should be applied to the work of each year. Courses planned in accordance with this principle will deal with the simpler aspects, or those of more direct application, in the earlier years and will defer the refinements to later years when these can be better appreciated. The course as a whole will then be better adapted to the needs both of those who continue and of those who drop out of school.

When it is said that the "simpler aspects" should be given first this is only good common sense, in accord with the age old precept "from the simple to the complex." However, when it is added "or those of more direct application" the English educators and many Americans would at once infer that this applies to a direct preparation for vocational competency. This is a possible inference though it may not be the one intended.

Further indications that this may be the correct interpretation, are the fact that *Vocation* is named as one of seven same objectives, which might indicate that the Commission considers it an end within itself rather than a means to an end. Especially is this true when it is stated [42, 22]:

> The work of the senior high school should be organized into differentiated curriculums. The range of such curriculums should be as wide as the school can offer effectively. The basis of differentiation should be, in the broad sense of the term, vocational, thus justifying the names commonly given, such as agricultural, business, clerical, industrial, fine-arts, and household arts curriculums. Provision should be made also for those having distinctively academic interests and needs.

This position is still further strengthened when the Commission encouraging an early choice, "at least tentatively, of some field of human endeavor for special consideration," [42, 18] state that "the field chosen will be for some as sharply defined as a specific trade; for others, it will be but the preliminary choice of a wider domain within which a narrower choice will later be made." [42, 18.] "Vocation as an objective requires that many pupils devote much of their time to specific preparation for a definite trade or occupation, and that some pursue studies that serve as a basis for advanced work in higher institutions." When it is said that "many should devote much of their time to specific preparation for a definite trade or occupation," while only "some pursue studies that serve as a basis for advanced work in higher institutions" it would seem that the emphasis is on vocational

preparation. Finally, it is stated that "pupils who will probably enter industry at the end of the ninth grade may well give as much as two-thirds of their time to vocational preparation, but they must not be permitted to neglect preparation for citizenship and the worthy use of leisure." [42, 24.] When all these statements are made at various places in the report one is easily led to believe that the Commission to a large extent has direct preparation of pupils for vocations in mind. There is, however, another possible interpretation of the position of the Commission which will be given immediately.

The preceding discussion is the strongest evidence that could be found of a sentiment for a predominant form of vocational education in the secondary schools. A more widely prevalent view is that vocational education should be only one phase of secondary education.

This is certainly a possible interpretation of the position of the Commission on the Reorganization of Secondary Education. They admit vocational education as a part of general education, but admit it in the early stages of the secondary period only under sufferance and then merely to hold the pupils. They feel that it is better for even this early education to be part vocational and part general or liberal than to be neither; which would be the case if the pupils were not in school. It is even better, they think, to teach vocational competency altogether than to teach nothing at all, and to teach it honestly rather than to permit it to be taught where the chief concern is private gain or exploitation of the pupil. That the public schools may, therefore, properly care for those students who would likely attend private business schools, many of which are notoriously inefficient, the Commission is willing that vocational education be established as a regular part of the program of studies in the public secondary schools. In other words, so long as the social order is as it is, and a service can be rendered to certain pupils by vocational education, rather than lose them the democratic secondary school, which must contemplate all adolescents, should offer vocational studies.

This line of argument seems to be consistent with the following from the "Cardinal Principles" [42, 17]: "The number of years that pupils continue in school beyond the compulsory school age depends in large measure upon the degree to which they and their parents realize that school work is worth while for them and that

they are succeeding in it. Probably in most communities doubt regarding the value of the work offered causes more pupils to leave school than economic necessity. Consequently, it is important that the work of each pupil should be so presented as to convince him and his parents of its real value."

A further aim is that after the pupil has been kept in school he may find his own best development through his vocation. "The purpose of democracy," says the Commission [42, 9],

> is so to organize society that each member may develop his personality primarily through activities designed for the well being of his fellow members and of society as a whole.
>
> This ideal demands that human activities be placed upon a high level of efficiency; that to this efficiency be added an appreciation of the significance of these activities and loyalty to the best ideals involved; and that the individual choose that vocation and those forms of social service in which his personality may develop and become most effective. For the achievement of these ends democracy must place chief reliance upon education.
>
> Consequently, education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends.

This high ideal is also evident in the way in which the pupil is encouraged to make his choice of vocation.

> "The pupil should be assisted ordinarily at about 12 or 13 years of age to begin a preliminary survey of the activities of adult life and of his own aptitudes in connection therewith, so that he may choose, at least tentatively, some field of human endeavor for special consideration. Following the period of preliminary survey and provisional choice, he should acquire a more intimate knowledge of the field chosen, including therewith an appreciation of its social significance." [42, 18.]

Again it is said [42, 23]: "In the seventh year, that is, the first year of the junior high school, the pupil should not be required to choose at the outset the field to which he will devote himself. For those who do not at this time have a definite purpose, opportunity should be given to gain some experience with several different types of work, such as some form of industrial arts, gardening or other agricultural activity, typewriting or problems drawn from business, household arts for girls, and for at least a part of the pupils some work in foreign language."

The commission thinks that vocational education should accomplish more than mere vocational competency. "Vocational education should

equip the individual to secure a livelihood for himself and those dependent on him to serve society well through his vocation, to maintain the right relationships toward his fellow workers and society, and, as far as possible, to find in that vocation his own best development.

"This ideal demands that the pupil explore his own capacities and aptitudes, and make a survey of the world's work, to the end that he may select his vocation wisely. Hence, an effective program of vocational guidance in the secondary school is essential.

"Vocational education should aim to develop an appreciation of the significance of the vocation to the community and a clear conception of right relations between the members of the chosen vocation, between different vocational groups, between employer and employee, and between producer and consumer. These aspects of vocational education, heretofore neglected, demand emphatic attention." [42, 13.]

For the above reasons it is agreed that "it is only as the pupil sees his vocation in relation to his citizenship and his citizenship in the light of his vocation that he will be prepared for effective membership in an industrial democracy. Consequently, this commission enters its protest against any and all plans, however well intended, which are in danger of divorcing vocation and social-civic education. It stands squarely for the infusion of vocation with the spirit of service and for the vitalization of culture by genuine contact with the world's work." [42, 16.]

The preceding is the other possible interpretation of the position of the Commission on the question of vocational education. This is exactly in line with the second of the types of vocational education mentioned by Dewey (above p. 85). Here vocational education is considered as a means to an end rather than as an end within itself. In consultation with two members of the Commission the writer learned that this interpretation is the one which these two had in mind. They realize that the school must recognize the existing social order even if it does not accept it. The pupil must be taken as he is under social conditions as they are, but without the necessity of perpetuating the existing order. If he is trained to understand the social significance of his work, that is, to see "his vocation in relation to his citizenship and his citizenship in the light of his vocation," industrial conditions may eventually be changed which would offer opportunities in the school for a better educational situation.

Whichever of the two interpretations here offered is the one intended by the Commission, it seems certain that the latter is the view that many of the progressives in educational matters

have accepted. Since Dewey himself has consistently held to the latter position and speaks for a wide following in America his views will be given at considerable length.

The Views of John Dewey on Vocational Education

Dewey says that "nothing could be more absurd than to try to educate individuals with an eye to only one line of activity." [56, 389.] He furthermore claims that the educational leaders are not given over to worship of the vocational. "To those who are in closer contact with the opinions which hold conscious sway in the minds of the great mass of thinkers and educational leaders there is something humorous in the assumption that they are given over to the worship of the vocational and industrial. . . . Nothing gets a hand so quickly in any gathering of teachers as precisely the sort of talk in which the critics engage." [55, 216.]

That Dewey believes that such subjects as cooking, sewing, printing, carpentry, forging, etc., should be a part of the educational requirements of the boys and girls of this country no one can doubt who has read *Schools of Tomorrow*. (Chapters 9 and 10.) That his purpose is not primarily to make breadwinners is likewise evident. "The pupils are not taking the courses to become carpenters, or electricians, or dressmakers, but to find out how the work of the world is done, . . . while an all round muscular and sense-training is insured." [54, 256.] Since the purpose of this part of one's school career is not the development of technical skill but insight into the ways of doing the world's work, Dewey thinks that each child should take many short courses in many different occupations. He even thinks it is desirable for a pupil to change from one line of work to another several times during the same year so that he may gain an insight into as many kinds of occupations as time will permit. "If even adults have to be on the lookout to see that their calling does not shut down on them and fossilize them, educators must certainly be careful that the vocational preparation of youth is such as to engage them in a continuous reorganization of aims and methods." [56, 364.]

For this reason he thinks that pupils should keep changing from one kind of shop work to another in order that they may keep on growing. "To keep on growing," he says, "he must have work that exercises his whole body, which presents new problems, keeps teaching him new things, and thus develops his powers of

reasoning and judgment." [54, 256.] His purpose here as it is everywhere else is not money-making, as he is at pains to make known, but the growth of the whole child, the *summum bonum* of all educational endeavor.

Dewey believes that a democracy should have just as much skilled labor as possible for "the existence of large masses of unskilled laborers, contempt for work with the hands, inability to secure the training which enables one to forge ahead in life, all operate to produce classes." [54, 313.] This is fatal to democracy. Hence the kind of industrial education which would be acceptable to him would "indeed make much of developing motor and manual skill, but not of a routine or automatic kind." The routine or automatic kind of education would be just as fatal to democracy, if not even more so, than the existence of unskilled labor, hence, "skill or technical method at the expense of meaning" [56, 360] cannot be tolerated. "Acquisition of modes of skill apart from realization of the social uses to which they may be put is fairly criminal. . . . Unless the mass of workers are to be blind cogs and pinions in the apparatus they employ, they must have some understanding of the physical and social facts behind and ahead of the material and appliances with which they are dealing." [54, 245–6.]

After one has entered upon his vocation it is hard to prevent just the state of affairs, described in the last quotation, from taking place. "But in schools, associations with machines and industrial processes may be had under conditions where the chief conscious concern of the students is insight." [56, 368.] That this is far from "vocationalization" in any sense except that it may enable the pupils to make intelligent choice is not difficult to see. In the sense that it is insight that is wanted and not simply vocational skill its aim is plainly educational.

We see then that Dewey does not think that we should look down upon "material things and upon the senses and the hands" [56, 329], but that he believes that work with the hands has within it educative possibilities other than trade results and money-making, and indeed, that the educative results are his prime consideration there can be no doubt. He is of the opinion that business may itself be a "culture of the imagination." [56, 290.] "How unreasonable to expect that the pursuit of business should be itself a culture of the imagination, in breadth and re-

finement; that it should directly and not through the money it supplies, have social service for its animating principle and be conducted as an enterprise in behalf of social organization!"

Since so many people in our present social conditions must earn their own living, and since Dewey ardently wishes that no one shall be deprived of this "culture of the imagination" and that all shall be animated by the principle of social service, he proposes that the schools be not used as "tools of existing industrial systems, but to use industry for the reorganization of the schools." [54, 311.] Hence, Dewey proposes that schools shall be conducted in such a way that the life work of every one shall be on this high plane. He wishes to breathe a soul into business. "The demand for such education as will acquaint workers with the scientific and social bases and bearings of their pursuits becomes imperative, since those who are without it inevitably sink to the rôle of appendages to the machines they operate." [56, 367.]

For this reason he is opposed to narrow trade education for the masses, and a literary and so-called cultural education for the classes. That he believes the formation of fixed classes is fatal to democracy no one can doubt who has read the last pages of *Schools of Tomorrow* and his article on "Learning to Earn." [59, 324.] "The democracy which proclaims equality of opportunity as its ideal requires an education in which learning and social application of ideas and practice, work and recognition of the meaning of what is done, are united from the beginning and for all." [54, 315.] However, when he says that there is to be one type of education for all, some writers jump to the conclusion, as did Bruce above, that he means all are to receive a narrow trade education. When the context of the passage Bruce quotes is examined it is seen that instead of the conclusion that all are to receive a narrow trade education the exact opposite conclusion can be reached, that all are to have as broad a type of education as possible. When one looks through the other writings of Dewey he cannot fail to see that this is just exactly what he does wish. But that Dewey thinks that hand construction and manipulation, the studies of industry and commerce, the management of business, especially when studied for their social bearings and significance, have each a valuable contribution to make to this high type of education no one can doubt who has read his *Schools of*

Tomorrow, and his earlier volume *School and Society*. If in some way the school could train its pupils so that they would carry a sense of artistry into their work, culture would be greatly enhanced. He is not willing that the 95 per cent shall be deprived of this sense and produce for the 5 per cent who have the sense of artistry. If all could do something well it would be much better.

Dewey asserts that education has in the past been largely vocational inasmuch as it has had only a few professions in mind. He now wants to do as much for those who will follow other callings as has been done in the past for the few professions for which the traditional school has been to a large extent a direct preparation, but he wishes to do much more than this. He demands that "all the items of school instruction shall be seen and appreciated in their bearing upon the net-work of social activities which bind people together." He wants the school instruction to do this for the man at the machine, but he also wants the man in the older professions to be less narrow and to have this same opportunity for growth along many lines. "The scientific inquirer should not be merely the scientist, the teacher merely the pedagogue, the clergyman merely the one who wears the cloth, and so on." [56, 360.]

Hence a person should be trained for all his vocations. "He must be a member of a family; he must have friends and companions; he must either support himself or be supported by others, and thus he has a business career. He is a member of some political unit, and so on." [56, 359.] If a person is developed just for one of these and nothing else, "he is so much the less developed human being." For this reason, Dewey wishes to do for the pure scientist, the statesman, the clergyman, as much as is done for the industrial workers, and he is decidedly unwilling to abandon the latter to the exploitation of unscrupulous employers.

In fact, it is difficult for one who has read all of Dewey's more important works on education to come to any other conclusion than that his prime purpose is to make culture democratic; and before this can be done industry must be humanized. It has not yet been humanized and may not even be in the process of humanization. Only by attacking this problem boldly can the schools make realistic science and machine industry humanistic. We cannot do it by seeking a refuge from them in a contemplation of the glorious ages of the past. "And while there is no guaranty

that an education which uses science and employs the controlled processes of industry as a regular part of its equipment will succeed, there is every assurance that an educational practice which sets science and industry in opposition to its ideal of culture will fail." [55, 216.]

Other Progressives on Vocational Education

Other progressives in education do not favor exclusive domination of the secondary school by vocational education, but agree for the most part with Dewey. Flexner's position is that of a genuine liberal education despite the fact that he has often been accused of narrow utilitarianism. "No subject of instruction will be retained," says one of his critics [209, 522], "whose 'real' utility is undemonstrable and education, as a whole, will become vocational, to a high degree of specificity." Flexner definitely says, however, that he assumes "that the Modern School of which we are now speaking contemplates liberal and general education." [75, 8.] In the Modern School "literature is to be taught . . . primarily for the purpose of developing taste, interest and appreciation, not for the purpose of producing persons who make literature or who seem to know its history; we hope to train persons, not to write poems or to discuss their historic place, but to care vitally for poetry—though not perhaps without a suspicion that this is the surest way of liberating creative talent. The Modern School would in the same way endeavor to develop a spontaneous, discriminating and genuine artistic interest and appreciation—rather than to fashion makers of music and art. It would take hold of the child where he is and endeavor to develop and to refine his taste." [75, 12.] Modern languages are to be studied for the purposes of "travel, trade, study, and enjoyment." [75, 13.] The main purpose of the Modern School is to train the pupil "to know, to care about and to understand the world he lives in, both the physical and social world." Flexner ends his discussion of the curriculum with the statement: "It is of course obvious that, if the Modern School were limited to industrial and commercial activities, with just so much language, mathematics and science as the effective prosecution of those activities requires, the higher potentialities of the child would remain undeveloped. But the Modern School proposes nothing of the kind. It undertakes a large and free handling of the phenomenal world appealing in due

course to the observational, the imaginative and reasoning capacities of the child, and in precisely the same spirit and with equal emphasis it will utilize art, literature and music."

It is clear from this that Flexner does not propose a form of vocational education for adolescents. He proposes a broad liberal education, or as Caldwell, Principal of the Lincoln School,[1] expressed it: "It is hoped that a broader education can be developed—an education that will help many to participate in life more effectively and more richly than is now the case. . . . Democracy needs not utilitarian education but significant education." After quoting this [203, August 8, 1918, p. 339] an English correspondent adds: "It is clear that these American schoolmen feeling their way onward are not dominated by materialism, the fear of whose spectral hands caused English pedagogues of old to shrink before any tendency that might be characterized as 'American.'"

Ex-president Eliot is of like mind with Dewey and Flexner. "If one had to choose," he says [67, 10–11], "between training the senses and training the memory and the language powers, one would choose the latter; but both are indispensable to the best results in education. Neither depends for its educational value on imparting information; each supplies an indispensable discipline for the human intelligence."

Snedden declares that we need "all the *vital*, *effective* general education—cultural and civic—that we can secure on behalf of all our citizens, in order that they may appreciate, understand and control the very complex economic and political conditions under which civilization in the future is to advance and be conserved." [172, December 28, 1918, p. 189.] He claims that "the development of vocational education will not conflict with the regular high school, 'the liberal arts college of the common people'. A constantly increasing proportion of American youth may be expected to seek two or three or four years of liberal education beyond the elementary school before embarking on their vocations or on the vestibule to their vocations. But these youths do want—and America wants for them—that these two or more years of education shall in reality function truly as liberal education—as genuine humanistic education, if you will." [184, 173.]

[1] The Lincoln School was established as an experimental school along the lines proposed by Flexner.

E. C. Moore's position is at first glance misleading for he asserts that "Education must be vocationalized throughout." [138, 366.] However, he hastens to add that "if it prepares them for it (their art) all education becomes real and vocational for the life of the religious person, of the citizen in a democracy, of the member of a family and a social and economic producer is the life into which they are called."

"I have a quarrel," he continues, "with the folks who are trying to give the good old word vocation the exclusive connotation of a money-earning occupation. One is called to many more than to produce goods for sale. His education at all stages must I think be broader than a mere effort to acquire salable skill though at certain stages the development of salable skill in a particular trade or occupation should be the chief element in his course, but not even then the only element." It is plain that Moore does not mean to advocate that kind of education that prepares merely for a recognized vocation. Purposeful education would more exactly describe his position. At least it can be said that he would not make vocational education the sole form of education for adolescents.

W. R. Smith avoids the difficulty from which Moore had to extricate himself. He says [180, 266–7]:

> The term 'socialization' must not be confused with 'practicalization' and 'vocationalization.' It might be possible to read into the two last-named terms all that is meant by socialization, but in ordinary use they are not so inclusive. Socialization does not merely refuse to exclude the cultural idea; rather it lays much emphasis upon it. It insists that culture in its broadest aspects must be a fundamental aim of education. No educational system with a program which does not bear fruitage in the highest culture attainable, can be socialized. Generally, although not necessarily, the vocational, the industrial, and the practical programs have contented themselves with the immediate end of producing economic efficiency. But the socialized program is far broader. It must be practical and to a certain extent vocational, but only because and in so far as culture has a material basis. . . . In our educational efforts culture, typifying the best in our civilization, must remain an equally important aim with vocational efficiency, typifying the most fundamental in our civilization.

The opinions of the men just given have been selected because their writings have been frequently cited as indicating a strong vocational tendency. Since it has been shown that none of them

are in favor of a predominant form of vocational education it seems reasonable to suppose that among educators at least the vocational tendency in the United States is not as strong as it has been claimed by certain writers. Of about seventy other writers whose opinions have been collected a great majority are at pains to show that exclusive domination of secondary education by vocational studies is not with them an aim. Some of these will be given.

Kilpatrick thinks that to reduce all higher education "to the strictly vocational, to the bread-and-butter utilitarian" would be "a calamity unspeakable." [113, December 1, 1918.] Judd and Bagley [101, 317] are of the opinion that when given trade education "should be accompanied just as far as possible by broadening, sympathy-cultivating instruction." Many of the prominent writers hope that citizenship, homemaking, social relationships of every kind, a worthy use of leisure, and broad outlook on life may be just as prominent aims as circumstances will permit. Inglis [94, 596] states that "it must be recognized that the preparation of the worker is one of the necessary aims of secondary education." However, he makes it plain that the "vocational-economic aim must not be allowed to exclude the social-civic and the individualistic-avocational aims. "Vocational education is not intended as a substitute for the old-fashioned kind, nor is it the purpose of those in charge to let it supplant any of the academic subjects that answer fundamental human needs." [126, 593.] "Vocational education is not to be thought of as a substitute for general education but as a necessary part of it, or as supplementary to it. To every one should be vouchsafed the opportunity for a broad all round education that makes for complete manhood or womanhood, which should be supplemented by adequate preparation for a chosen occupation." [172, Vol. 5, p. 564.] "But no matter what vocation a student is to follow he must become a citizen and should, therefore, be trained for genuine citizenship which necessitates an 'intelligent active participation in human affairs.'" [122, 42.]

It is, therefore, a question whether the associations which Judd described as doing so much to advance the cause of vocational education, together with the Smith-Hughes Act, will be able to prevail against the undoubtedly predominant opinion of educational writers and leaders. From the evidence it seems that

American educators wish rather to give every child, rich or poor, a chance for full and complete development than to make him merely vocationally efficient. To be democratic the school must supply the demands of its clientele, and, since vocational education makes an appeal to some pupils that nothing else will, it is offered as one of the means by which pupils of a certain type may be reached, and it is hoped that it may also be made an effective agent in attaining the larger end of complete development.

Other writers have also found this to be true. It was shown above (Chapter II, p. 18) that the economic appeal is a bad second to the more genuine American ideal of universal education. Bawden [208, 1916, p. 145] reaches a similar conclusion. He finds that a form of objection to vocational education arises "from the belief that the vocational education program is determined by an incomplete vision of the real meaning of education, and that it sets up aims that are indefensibly narrow. Basing their judgment on the performance of certain private institutions conducted primarily for gain, critics of this type appear to conceive that to train a boy or girl in the operation of some factory machine or process by means of a brief intensive course is regarded and accepted as vocational education. To this view the one sufficient reply is that it is wholly mistaken. There is no evidence that this is the view held by the framers of any of the legislation thus far enacted. On the contrary, emphasis is quite generally placed, in the laws themselves, on the supplementary instruction necessary to build a well-rounded course of training.

"Furthermore, the experience of the States which have undertaken to deal specifically with this problem demonstrates that this narrow conception of vocational education is not the one which will prevail in this country. It is not believed that the vocational education movement can be justly charged with seeking anything less than the highest interests of young people and the social whole."

Statistics Indicate No Strong Tendency Toward Vocational Education

The statistics that have been collected seem to indicate that as yet there is no strong tendency toward a domination of secondary education by vocational education. According to the United

States Bureau of Education [208, 1917, Vol. II, p. 14] there were in 1915 only 89,338 students, or 6.92 per cent of the total enrollment, studying agriculture, 14,424 students, or 1.12 per cent of the total enrollment studying bookkeeping, out of a total enrollment of 1,291,187 students in schools reporting on studies. No other vocational studies were listed unless such subjects as manual training and home economics be considered as vocational subjects which should not be so considered since the primary aim of those studies is not to prepare for a recognized vocation.

The aggregate numbers of academic and vocational units[1] in the North Central Association of Colleges and Secondary Schools were in 1916, 24,317 and 10,346 respectively. [144, 97.] This is slightly less than 30 per cent of the total number. "Vocational Units" was, however, defined to include manual training, home economics, music, agriculture, commercial subjects, art, and drawing. [144, 51.] When all these subjects are included it is surprising that the number was no larger.

In the state of South Dakota in a recent investigation [172, Vol. 8, p. 778] it was found that there were 55 teachers of business out of a total number of 1077 high school teachers in the state. There were 24 in the department of teaching. No other vocational subjects were mentioned.

The Real Issue in Vocational Education

From the preceding considerations it seems that the issue in the question of vocational education is not whether it shall dominate the secondary school curriculum but (1) whether when both England and the United States are considered it shall be a part of secondary education at all, and (2) to what extent when America alone is considered it shall be given.

To the first question the answer in England is in the negative as has been shown. The answer in America is in the affirmative, because there seems to be a demand for it. That there is such a demand is shown by the results of the San Francisco Survey. It was found during the survey that in that city alone there were "164 schools not under the control of the city school system of which number at least 106 offer courses more or less vocational in

[1] A unit is equal to a semester's work of five hours a week.

character." [169, 493.] The great number of private business schools throughout the country lead one to believe that this is more or less typical. The Surveying Committee in this case, true to the American policy of providing all kinds of educational opportunities for adolescents at public expense, raised the question as to the consequences "of permitting private enterprise to engage in the business of supplying these needs." [169, 493. Cf. above p. 32.]

Many writers favor it as a part, but only as a part, of secondary education. This is implicit or explicit in practically all the statements above. Inglis [94, see index], Monroe [133, see index], Johnston [95 and 96, see index], and other authors of text-books on secondary education give vocational education a place, but not an exclusive place. In every educational survey that has been made recently the same position is taken when recommendations on the question of vocational education are made. Every differentiated program of studies examined provides for one or more vocational curriculums.

Opinion Varies as to the Extent to which Vocational Education should be Given. As to the second question, the extent to which vocational education should be given in the regularly established secondary schools of the United States, practice and opinion varies. It was shown above that the Commission on the Reorganization of Secondary Education go so far as to encourage early choice and permit some students to spend as much as two thirds of their time on vocational subjects. Noyes [145, 155] describes one type of junior high school in which "the boy and girl and their advisers decide, so far as they can when he or she enters the seventh grade whether he or she shall go to college, to the farm, to the counting-house, to the kitchen, to the factory, or to the studio. . . . The general principle is that of early decision as to vocation. That such courses are called optional should not divert one from the fact that the effect of such an arrangement is early choice and specialisation in vocational lines. . . . The justification for such specialisation is that most of the pupils, especially in city schools will not go to high school anyway, and hence they are better fitted for their life work by some specialized training for it, even at this early age of fifteen to sixteen." However, Noyes found [145, 155] a third type of junior high school which "is based on the principle that the boy and girl should have as great a

variety of experiences as is practicable and that definite vocational choices should be deferred as long as possible."

Bawden [208, 1916, p. 146] seems to think that choice will not be made before the age of fourteen. "One prominent spokesman," he says, "publicly charges vocational education with being a deliberate attempt to determine arbitrarily the life occupations of boys and girls, and to divert them at a tender age into careers which hold no promise for the future.

"As Snedden has ably pointed out, this is a baseless charge. There is no issue with regard to vocational education under fourteen years of age, since there is 'little or no serious discussion of vocational education, as a direct and purposive preparation for a specific calling, which now contemplates any claim upon the years required in most states to be given to compulsory school attendance, namely from six to fourteen years of age.' "

A possible inference from this statement is that vocational education shall have a claim after fourteen. From Snedden's more complete statement, however, it seems that his position is very similar to that of the group of educators who wish to make vocational preparation educative in the broad sense of the term. His position is as follows [183, 64]:

> For those trades and commercial callings in which a considerable period of systematic training, involving definite practice on the one hand, and a large amount of correlated technical instruction on the other, is required, my prediction is that our program will eventually assume something of the following shape:
>
> Young people from fourteen to sixteen years of age who cannot continue further their general education will either give their entire time to a vocational school equipped with shops and all facilities for productive work, or else will have substantially half of their time provided for in a vocational school and the remainder in work directed by the school in industries, the school undertaking to direct or at least advise as to the shifting of the young learners from job to job, with a view to making such practical experience of maximum educational value.
>
> At about sixteen years of age, these young workers will be introduced to their respective industrial callings under the guidance of the school, by an arrangement entered into between the school and the industry, the school still retaining supervisory oversight, for two years, of the learners, with a view to preventing their being confined too exclusively to a limited field of work, and to insure that their practical experience shall give a large return in educational development. During this period the wage of the

learner will be determined primarily on the basis of the requirements of his educational program, and only secondarily in view of what he might be making as a producer through the employing establishment.

Bonser Favors a Rather Strong Vocational Tendency. Bonser states that in the senior high school "more definitely specialized vocational courses in industrial, commercial and vocational fields may well be offered for those not expecting to enter more advanced institutions. . . . Here fully half the time, or even more than half, may be devoted to shop, office, or field practice and closely related technical or supplementary subjects."

Elsewhere, however, Bonser [20, 325] makes it plain that he does not wish vocational education to become predominant in education.

> Since the early entrance to industry, he says, is more largely from the families of poorer people, any narrowly specialized form of industrial training which neglects to develop potential capacity for more advanced work tends to keep those poor who are poor and to develop ultimately a caste system.
>
> In the development of our industrial life, we must do all we can through the schools to increase individual and collective industrial efficiency, but in no case must we use the schools as a means of limiting or subordinating the elements and values of the larger citizenship, either individual or collective. Keeping our perspective under the light and guidance of democratic ideals is necessary as never before. In the broader development of our material resources we must make no fatal error in the development and conservation of our human resources.

Bonser also offers a possible program for the junior high school which though rich in vocational elements does not demand so much time as Bonser advocates for the senior high school. In the junior high school he thinks there may well be five groups, "the academic, the industrial, the commercial, the agricultural, and the household arts groups." [18, 572.] His plan for organizing these curriculums is as follows:

> By rating each year's work at thirty units, the distribution of eighteen to work in common and twelve in the differentiated fields gives a total of fifty-four in common and thirty-six in group courses. The fifty-four units covering subject-matter of common value and about equal interest if properly humanized may be distributed as follows:

12 units—English
8 units—History
8 units—Geography
8 units—Elementary Science
5 units—Everyday Mathematics and Economics
6 units—Civics, Problems in Institutional and Vocational Life
4 units—Physical Education
3 units—Music

The thirty-six remaining units may be made up by selecting entirely from the offerings in any one of the five groups suggested in the foregoing, or by some selection from two or more groups. It is by no means suggested that these groupings be made water-tight compartments.

Only Extreme Cases Show a Strong Vocational Tendency

In Los Angeles there are to-day over 100 subjects listed, nearly 75 per cent of them dealing with industrial and commercial subjects. [85, 112.] Johnston reports an investigation by one of his graduate students of so-called high school "courses of study" "from fifty-four high schools in towns of over 4000 population, representing practically every state in the union, and representative also of the smaller cities of these states, showed a total of 93 subjects offered, 50 of which may be classed as vocational." [97, 583.] Johnston does not, however, give any definition of what he means by vocational education. Meek reports from Boise 50 per cent of the program in that city as industrial. [130, 669.]

F. E. Barr [11a, 393] gives actual percentages of the time devoted to the vocational subjects as follows:

> The time given to the practical arts work varies greatly in the various grades and in different schools. The average is about 5 per cent in the first six grades, 6 per cent in the seventh and eighth grades, and 25 per cent in the senior year of the high school. . . . The time allowed for the work is not sufficient to cause even such work as is given to function to any great extent as practical or industrial training.

When the most extreme cases in practice are taken it is rarely found that even those who are registered in commercial and industrial courses devote more than 50 per cent of their time to vocational subjects. Goddard (Proc. of N. E. A. 1917, p. 605) found that there are two plans operative in the country as a whole. One gives approximately one-fourth of the time to the vocational sub-

jects and three-fourths to the academic or general subjects. This is the plan in Michigan, Wisconsin, Minnesota, and a number of other states. The second plan requires that a distinct vocational department must be maintained in which pupils take all the work of their courses and in which the vocational aim must be given chief prominence. Half the time must be devoted to vocational work. This is the plan in Indiana, New York, and Pennsylvania. Not all the students of any school, it is needless to say, are enrolled in these departments.

Vocational Education Not Intended for All nor the Sole Training for Any One. From the foregoing considerations it is plain that vocational education is not intended for everybody nor is it expected that it shall be the sole part of the education for anybody. While it is true that in some cases a strong vocational bias is evident, yet when the total result is considered here again it seems that the second group of vocationalists represent the dominant tendency. If Goddard is right in stating that from 25 to 50 per cent of the pupils' time is devoted to vocational subjects, and since it is estimated that only about 25 per cent of the pupils in the high schools of the United States are enrolled in vocational courses [208, Vol. I, 1915, p. 279, and 1917, Vol. II, p. 514] it is evident that less than one-eighth of the total work of the high schools throughout the United States is devoted to vocational subjects. In the survey of Springfield, it was found that only 7 per cent of pupil recitations was devoted to commercial subjects, while English occupied 22 per cent of the time, Mathematics 20 per cent, Science 12 per cent, or 54 per cent for these three alone. The remainder of the time was divided among the other subjects as follows: History, 10 per cent, Latin, 8 per cent, Manual Training, 8 per cent, Domestic Science, 7 per cent, German, 4 per cent, French, 2 per cent. [3b, 113.]

The Possibilities of Developing a Caste System in Secondary Education. When democratic standards are taken as a basis for judging the existing situation in regard to vocational education there are two conflicting opinions. One takes the position that the old system of secondary education was a caste system because it was suited only to the needs of a few and accordingly drove many away. "There have long been provided the means of training lawyers, doctors, ministers, engineers, musicians, teachers, etc.," it is claimed [87, 2], "(members of different professions who

constitute altogether about five per cent of all the gainfully employed), but for the common occupations, of home-making, of personal service, of clerical callings, and of transportation on land or sea—the public means have been inadequate, especially since the decay of apprenticeship and of the gilds, and since the growth of the factory system." It is proposed, that "the needs—all the needs—of the future industrial workers be given the same careful attention in the secondary school as are the needs for the future professional and commercial men."

The other group claims that the proposal that vocational education be given early will perpetuate a caste system, because it divides the school into classes, even if it does give to the industrial class a better education of the kind that they have hitherto acquired empirically. This is the position of Judd and Bagley. "It is contended," they say [101, 317], "with unlimited emphasis on the needs of democracy, that whenever trade training is given it should be accompanied just as far as possible by broadening, sympathy-cultivating instruction. To give early a limited occupational training will tend (1) to set up class distinctions, and (2) to deprive large numbers of children of the broad basis of general and liberal training which is essential to successful democracy." These men describe a type of junior high school "which sharply differentiates and divides its students into entirely different social castes. Some of the latter types of schools have laid great stress on commercial or industrial training and have treated the junior high schools as the device for introducing into public schools a narrow type of vocational training at an early age in the life of the pupils." [101, 321.]

Judd is especially insistent that the masses shall have just as broad training as the classes.

> To my mind we may as well give up the boast of democracy if we are to have industrial education for the masses and a liberal education for the favored few. When I hear some boastful pedant talk about the chosen few who are to radiate light for the guidance of the many and when I hear him talking of industrial education as a boon to be presented by his exclusive and ruling class to the multitude, I can think of but one answer and that is an invitation to go and preach his pernicious doctrines to willing listeners in middle Europe. [99, 160.]

Others are of the same opinion. Bonser, for instance, states that "since the early entrance to industry is more largely from the

families of poorer people, any narrowly specialized form of industrial training which neglects to develop potential capacity for more advanced work tends to keep those poor who are poor and to develop ultimately a caste system." [20, 325.]

Weld is in complete agreement with this view. [210, 264.] "The movement toward vocational education is in the right direction. Most emphatically so. But is it not in some cases too radical? Is it not likely to be directed along too narrow lines? Does it not, in some of its aspects, tend to foster rather than prevent, the development of a distinct industrial class—of an industrial caste even?"

There is very little doubt that this is the case under some circumstances. It is a question, however, whether it is a caste system, when vocational education is so conducted as, first, to foster the individual growth of those who take it as Dewey and the progressives plan for it to do, and thereby prepares for the existing social order. Secondly, if in giving an appreciation of the social and industrial foundations of life, it thus prepares for a possible modification of the existing social order. Thirdly, if it is conceived only as one means of using the pupil's whole environment for his education; in other words, if vocational education be used as a means to a larger education, rather than as an end within itself. If the first of the two forces described by Dewey above should predominate then it is likely that vocational education will mean the development of caste, but if the second should predominate there is no likelihood that such will be the case. It seems that there is a strong probability that the latter will prevail as has been shown.

Secondary Education Should Be Both Cultural and Practical

If then to select vocational education for one group of pupils primarily while another devotes its time to the cultural subjects would tend to develop class distinctions, the question arises whether it would be possible to have a curriculum which serves both vocational and humanistic purposes at the same time, that is, to blend the cultural and the practical. Dewey thinks that "If we had less compromise and resulting confusion, if we analyzed more carefully the respective meanings of culture and utility, we might find it easier to construct a course of study which should be useful and liberal at the same time." [56, 302.]

A number of other writers have been found to champion this position. Judd declares [99, 151] that "the stability of our institutions depends upon the discovery of some method of bringing together industry and the liberal arts." The following are typical statements from other writers:

> Universal secondary education combining both the cultural and the vocational in a scientifically balanced curriculum must be adopted as the American slogan. [71, 309.]
>
> The citizen of the future should be a *cultured vocationalist*. . . . These (the vocational and the cultural) are in no wise contradictory, but are reciprocally interdependent. [213, 661.]
>
> I hold no brief for a type of education in which culture and utility are mutually exclusive. [70, 135.]

The problem of providing for both the cultural and the practical seems to be the main problem in the secondary schools of the United States. From the foregoing discussion there can be little doubt that educational opinion is strongly against substituting vocational education for liberal education. It is likewise evident that vocational education will be a part of secondary education, but it seems that all subjects, even vocational subjects, will be selected more with a view to their social values than to their vocational values. This will be taken up again in the following chapter.

Even if the educators in the United States should succeed in accomplishing this ideal and should put vocational education on a liberalized plane as Dewey and the progressives propose, still this would be far beyond anything England has as yet been willing to allow in early vocational specialisation. The English do not accept such liberalized vocational training because they consider it vocational nevertheless and not educative in intent. The English also do not accept the principle advocated by certain American writers that if a pupil is going to leave school early anyway he should, therefore, be given vocational training. Inglis [94, 576], for instance, says that "by far the greatest proportion of those leaving school before the completion of the course will engage in practical arts pursuits. For those pupils instruction in the practical arts subjects of a vocational purpose and character is necessary and legitimate."

English and American Practices Compared

The English would ask why it is on this account "necessary and legitimate." In a few days or weeks after the worker has entered upon his vocation he will have acquired easily all the skill that he could possibly have acquired under more or less artificial school conditions and if he has devoted his time to vocational subjects in school to the neglect of those broadening subjects he might have taken, they are forever lost. That a worker may acquire skill quickly has been shown by the speed with which many trades were learned during the war. The following explains such a situation even in times of peace. "Two or three weeks, or even less," it is said [94, 582],

> suffices to master all the technical training and skill that can be employed in the work,—which is true of about 85 per cent of the paper-box-making industry and of about an equal per cent of the machine work in shirt and collar factories,—it is evident that no grade training at public expense should be provided. If the advanced processes of the work are so simple in nature that all the knowledge and skill needed can be picked up in the trade itself with what little assistance can be given by a foreman, which is possible in plants working in white goods, in power sewing, straw hat sewing, and underwear knitting, it is then inadvisable to use public funds for training workers to enter the industry.

It is still a question, therefore, whether the American practice is best even for those who will almost assuredly drop out of school early. "It still remains a task for the future to determine whether the national experiment in providing early specialized vocational preparation on the basis of an elementary education will meet the needs of a democracy more satisfactorily than an extended general education followed by short intensive training which has proved so successful in the war industries." [203, November 28, 1918, p. 516.]

England's answer on this question is clear and definite. She will not permit industrial education to "strike its roots deep down into the elementary school," as Leavitt advises (above, p. 87). England will not permit the field chosen even for "some" to be "as sharply defined as a specific trade," nor will she permit those "who will probably enter industry at the end of the ninth grade" to give "as much as two-thirds of their time to vocational preparation," as the Commission on the Reorganization of Secondary

Education are willing to permit. Likewise England was careful in passing the recent Education Act to prevent just such a situation as the Smith-Hughes Act tends to create. England is opposed, as was shown in the preceding chapter, to any kind of early specialisation before sixteen years of age and thinks that a choice of vocation should be deferred; while in America it has been shown that early choice "at least tentatively" is encouraged. Kenyon [110, 23] in his final conclusions states that "all alike deprecate the conduct of education in a commercial spirit, and declare their faith in a liberal education as the foundation for all activities of mind and spirit in a civilized country." The English, therefore, concentrate early upon humanistic-cultural values, languages, history, science, mathematics, etc., and then on top of this broad liberal training they superimpose vocational and professional preparation. England expects a large part of one's vocational training to be acquired after one has entered upon his trade. The English believe in vocational education "but let the industry give it at the cost of the industry." [203, April 17, 1919, p. 185.] "You will train your banker in a bank," seems to be the English attitude. This seems to many to be the correct solution of the problem of vocational education since, as was shown above, in many trades and occupations by intensive training all the skill required may be attained very quickly, and is, therefore, useless to try to teach it in school as now organized.

Accordingly, the English are opposed to the principle that certain pupils should be given a vocational education while others are given a liberal education. A deputation from the Classical Association laid the following proposal before the President of the Board of Education, which, although it may at first sight seem to indicate that it was a plan to keep the curriculum of the secondary schools under the control of the classicists, nevertheless its principles seem to have been accepted by many other associations. "The Classical Association desires to draw the attention of the Board of Education to the existing tendency, by which the education given to the cleverer children who come from the elementary schools bears a different stamp from that given to children of the professional classes, being directed more narrowly to material and industrial well-being and less to the effective study of literature and history.

"Among the pupils from the elementary schools will be many

who are likely to exercise influence in the public life, both municipal and national, of the coming generation; and in the interest of the whole community it is of high importance that these future leaders of their fellow-citizens should have some knowledge of the past history of mankind, especially of its political institutions and experiments, and should acquire an enduring interest in the ideals of both private and public character, by which the noblest sides of civilization have been moulded. The Classical Association observes with interest the declaration of the Workers' Educational Association:

"'That since the character of British Democracy ultimately depends on the collective wisdom of its adult members, no system of education can be complete that does not promote serious thought and discussion on the fundamental interests and problems of life and society.'" [110, 32.]

Whether it is better for the pupil and for the nation, whether it is in the interest of democracy, to allow early specialisation along vocational lines is not a question for easy solution. England solves the problem in one way, America in another. The fact that America attempts to give universal free secondary education and England does not, possibly has something to do with the difference. It is in the interest of Democracy to attract as many pupils as possible into high schools, so America thinks, but England wishes to attract the best pupils to the secondary schools. The difference is not entirely due to this cause, however, as the same principle of postponing specialisation applies to the continuation schools in England as to the secondary schools. After pupils are in school, to separate them off into differentiated curriculums, some pupils devoting much of their time to vocational subjects and others devoting all their time to liberal subjects, may bring about cleavage and class distinctions which are hostile to democracy. It may be, therefore, that the correct solution has not been reached in either country.

CHAPTER V

THE BASIS FOR THE SELECTION OF CONTENT IN THE MODERN PROGRAM OF STUDIES

Social values broadly conceived and not vocational efficiency will be the basis for the selection of subject matter in the future, as was stated in the preceding chapter. In that chapter it was shown that even a study of vocations, trades and industries may be so organized and so taught as to bring the pupil to a clear comprehension of their social significance in the world today. We propose in this chapter to carry this line of argument still further and show that all other subjects of whatever kind and the theory by which their contents are selected are coming more and more to be measured by social standards.

The reasons for thinking that these statements are true, are (*a*) the intelligent comprehension of the modern world in all its aspects, political, industrial, economic, and intellectual, is a dominant purpose in modern secondary education. (*b*) Opponents in recent controversies on the question of curriculum values are agreed, at least to the extent that subject matter should be broadly social in intent. (*c*) The expressed aims of the various subjects in the present programs of studies are broadly social rather than mainly literary. (*d*) Modern conceptions of educational method so far as they imply subject matter demand a social content.

Comprehension of the Modern World as an Aim

To-day the social ideal permeates modern educational philosophy through and through and is the dominant note in the reorganization of secondary education. Much of the recent unrest in matters educational has been due to a belief that the activities of the secondary school have not had in the past and still do not have a social value, but are in large part based on bare tradition, and that these activities have accordingly lost their value for modern life. As a consequence there has arisen the feeling that "the old conception of a liberal education . . . is not adapted either to the needs of the pupils or to the requirements of the

communities in which they live to-day." [203, November 14, 191, p. 490.]

Accordingly, the movement to put secondary education on a social basis has developed because it is thought that there is need both within and without the school for more life contact that "we know with tried certainty that nothing counts but that which really and vitally serves the good of folks" [137, 335]; that "what we are really concerned for is the good of folks" [135, 231]; that "all literature, all art, all science, all government, all religion . . . have no other reason for existence than to teach folks to live well" [135, 232]; that "we must make two conquests and keep making them as long as we live. One of these is the conquest of nature, the other is the conquest of social relations. The conquest of nature is relatively easy; but the conquest of social relations is so difficult that as yet but a mere beginning has been made in it." [135, 243.]

Moore thus clearly makes human beings the center of all consideration in education. Many others are in complete agreement. It is stated that whatever else may be dispensed with "no one can dispense with a knowledge of *man*. Every one needs it, and is using it each minute he is in relation with human beings, whether he is speaking to them, or reading what they have written, or engaged in work which at any point touches them" [172, September 14, 1918, p. 311]; that "the main theme is men, not things, and the way men have conceived the relation of things." [172, July 20, 1918, p. 62.] Furthermore it is stated that "knowledge is instrumental to a life process and . . . the selection of content must be based, not on some supposed intrinsic merit of the knowledge itself, but on its value for the social process" [172, October 19, 1918, p. 451]; and that "the man educated in the modern sense will be trained to know, to care about and to understand the world he lives in, both the physical world and the social world." [75, 8.]

If these statements are typical of the American situation, as they seem to be, one can gather from them that secondary education is coming more and more (*a*) to be centered around the study of human beings and how they have conceived the relation of things; (*b*) that it is the present with all its problems rather than the past that is of primary concern, the past being important only as it enters into the present and helps solve its problems, and (*c*)

the thesis of this section, namely, the acquisition of an intelligent comprehension of the modern world, both the social and the physical, is established.

The English Position. Very little distinction if any can be made between the English and American positions. Perhaps it is correct to say that England still values the traditional and the past more than the United States does, but at the same time values them as throwing light on the present. On the other hand, the United States emphasizes the present and in doing so runs the risk of forgetting the past. The American practice may become too technical and commercial, the English too bookish. However this may be, the general aims in England seem to be the same as the American aims described above, as the following quotations will show. "No knowledge can be put on a level with a knowledge of human nature." [198, 580.] "The aim of a modern education should be to impart an intellectual knowledge of the Modern World." [173, 123.] "Modern side work is the work of the future, as every schoolmaster knows. It can provide that spiritual elevation and wideness of outlook that will defeat material prejudice." [203, May 30, 1918, p. 266.] "A second capture of Constantinople back from the Ottomans may usher in a second and sizable awakening of the European mind to itself, an intense study of the world it lives in, in all its physical, biological, racial, and linguistic aspects. Nothing else has the initiative now." [203, December 21, 1916, p. 245.]

The reply of the Council for Humanistic Studies to the letter of the Committee on the Neglect of Science seems to be in complete accord with the general sentiment of the writers just quoted and has exerted a wide influence on the reconstruction of secondary education in England. "Education," it says [110, 6], "should be nothing less than a preparation for the whole of life. It should introduce the future citizen of the community, not merely to the physical structure of the world in which they live, but also to the deeper interests and the problems of politics, thought, and human life. It should acquaint them so far as may be, with the capacities and ideals of mankind as expressed in literature and art, with its ambitions and achievements as recorded in history, and with the nature and laws of the world as interpreted by science, philosophy, and religion. If we neglect physical science, we shall have a very imperfect knowledge of the world around us; but if we

ignore or subordinate the other elements of knowledge, we shall cut ourselves off from aspects of life of even greater importance. Even physical science will suffer. Some of its most distinguished representatives have strongly insisted that early specialisation is injurious to the interests they have at heart, and that the best preparation for scientific pursuits is a general training which includes some study of language, literature, and history. Such a training gives width of view and flexibility of intellect. Industry and commerce will be most successfully pursued by men whose education has stimulated their imagination and widened their sympathies."

Recent Controversies Harmonized

A comparison of the curriculums proposed by Mr. Abraham Flexner of the Rockefeller Foundation and Dean West of Princeton shows that each stresses social values. Four main fields constitute the substance of Flexner's curriculum—science, industry, aesthetics, and civics. West proposes three main fields,—the world of nature, the world of man, and the world of the intellect.

Flexner has already been quoted (above, p. 115) to the effect that "a man educated in the modern sense will be trained to know, to care about and to understand the world he lives in, both the physical world and the social world." In order that the pupil may fully appreciate and comprehend the physical world, Flexner declares that "the work in science would be the central and dominating feature of the school." [75, 10.] West, on the other hand, also gives a place to science that the pupil may understand the world of nature. He asks [216a, 30], "What are the things a really liberally educated man ought to know?" His answer is: "Every human being who thinks or who does not think is faced by three commanding intellectual questions so long as he lives on this planet. The first is the problem of the vast world of nature, the world of things outside him, the largest and outermost circle, within which his whole life is spent. The answers to this problem, so far as given at all, are given in mathematics and science."

West's second grand division "is the problem of mankind. . . . Here the mother-study, source of all the rest is history proper. . . . The elements of political and economic studies should also be known for their revelation of the fundamental laws of government and business." [216a, 30–31.] On the other hand,

to meet the needs of the social world Flexner introduces two subjects into the curriculum, "industry" and "civics." "The industries growing out of the fundamental needs of food, clothing and shelter; the industries, occupations and apparatus involved in transportation and communication—all furnish practically unlimited openings for constructive experiences, for experiments and for the study of commercial practices. Through such experiences the boy and girl obtain not only a clearer understanding of the social and industrial foundations of life, but also opportunity for expression and achievement in terms natural to adolescence." [75, 11.] "Civics includes history, institutions, and current happenings." [75, 13.] West desires political and economic studies for "their revelation of the fundamental laws of government and business." Flexner desires a study of industries and of civics for a clearer "understanding of the social and industrial foundations of life." Both men believe in history but with this difference: West stresses ancient history, while Flexner would lay chief emphasis upon an understanding of the present.

This foreshadows the main difference in the position of the two men. West is an ardent advocate of Latin and Greek while Flexner accords them no place in the modern school. Flexner would, however, have the classics taught in translation. [171, Vol. 25, p. 285.] Flexner and West are both in favor of modern languages. Flexner mentions music and art. West mentions neither. Both would of course give a place to the mother-tongue. With this analysis and comparison one feels justified in concluding that both these men are in favor of a curriculum whose chief purpose is social welfare.

The New York *Times* [204, July 6, 1919] comparing West's position with that of H. G. Wells reaches a conclusion almost identical with the one just presented, that is, that the positions are not as dissimilar as they seem. "The American Classical League," says the *Times*, "in which Dean West is a leading force holds that education worthy of the name 'involves training of the mind, not for the sake of money, place, or power, but in order to develop our boys and girls to their highest mental and moral excellence, to make them masters in thought and expression!' From such a statement," continues the *Times*, "to the educational theories of H. G. Wells may seem a far cry. But is it? In his recent pamphlet on 'The Elements of Reconstruction' Wells says: 'The

antagonism of science versus the classics in education is perhaps the most mischievous, and certainly the silliest, of all confusions of issue.' The clear issue is that we shall know 'about the mind of man, the purpose of his life, the nature of the universe.' Is not this also humanism?"

Whatever else may be said its main purpose is to select subject matter according to social values. This is seen still more clearly in what follows: "The humanism of Wells," continues the *Times*, "is concerned less with the study of dead languages than the classicists would perhaps desire. His idea is that mankind shall study man directly, in the closest possible contact. 'Philosophy; the history of the world from its problematic beginnings to the present; the story that physical science has to teach—ethnology and archaeology, anatomy, embryology, biology; these, together with the social sciences that necessarily spring out of historical and biological teaching, constitute and alone can constitute the liberal education which must be the substance of a nation's culture.' This is the essence of humanism."

It seems, therefore, from these two comparisons that it is agreed that social values, human interests, human relationships and human needs will be the dominating principles by which subject matter will be selected in the future both in England and America.

Social Studies Becoming Prominent

From considerations of this nature certain writers believe that "the lesson we all need to learn is a lesson taught by some broad social science," and are advocating "that the curriculum be made over so that the individual studies shall radiate from and center about a study of society." [99, 161.] Judd recommends that we add

> to training in the liberal and industrial arts a third and more comprehensive kind of education. This inclusive education is to give to each individual knowledge of his fellows who work in other spheres. This inclusive education is to offer to each member of society a view of his own place in the scheme of national life. Seeing himself, the individual will see also others and there will grow up in all minds thus trained a sympathy broader than that which comes from cultivation of either the industrial arts or the liberal arts. . . . It is the duty of our people to know themselves and be unsparing in detecting their own failures and wise in evaluating their

own successes. In order that this may be possible there must be a steady conscious effort to instill into the thinking of every child an appreciation of society and its structure.

Whatever else may be true it seems that this is the standard to which all educational movements eventually return, and "each revival of the humanistic spirit has been the result of a new revelation of the way in which men living together may master the world" for human ends. [99, 161.]

Judd's reason for advocating such a change is that he would like to see "the children in the lower schools taught about the work and interest of their fellows. I should like to have every boy and girl know that the federal government is not made up merely of Congress and the President and the Supreme Court, but that there are at Washington great economic agencies in the Department of Agriculture and in the Department of the Interior which are transforming the United States from a frontier into a productive civilized land where men may live and the arts flourish." [99, 161.] It is coming to be realized that any subject that is worth teaching at all may and should be taught so as to attain this end.

The social sciences on account of their peculiar position in a socialized curriculum have within the last two decades come into very great prominence in the United States and bid fair to rank with English as the two leading subjects in the curriculum of the American secondary schools. To meet the needs of democracy in politics, in economics, and civic enlightenment is their definite purpose. A frequently expressed aim of history is to throw light on the present, and in the hands of the most advanced history teachers it becomes a study of the present interpreted in the light of the past. The other social sciences are a direct study of the present. These studies are fundamental to the development of the new conception of humanism because they touch life at every point.

The reason for thinking that the social sciences will be prominent in the future is that everybody in the United States, and to an extent also in England, seems to accord them a place in the curriculum. It was shown above that both Flexner and West give them a prominent place in the curriculum. Judd's position has already been given. Others take the same position.

The process of socialization will require greater emphasis on the social studies in our schools. The linguistic-mathematical core of the classical curriculum must give way to a social core. It is not to be supposed that the languages and mathematics will not find a place in the socialized curriculum but merely that their place should be subordinated to social studies in point of emphasis and requirement. . . . Furthermore since mutual dependence has become the central feature of our society the central feature of our school course should be the studies most directly fitted to develop the spirit of coöperation necessary to live and become efficient under such conditions. Community civics and government, history, and economics, and such phases of psychology and sociology as deal with vocational fitness and the analysis of ordinary social problems must be elaborated, applied to actual social conditions, and made to function in the formation of social aptitudes and the stimulation of social service. [172, July 13, 1918, p. 38.]

President Butler thinks [33, 68] that Ethics, Economics and Politics

must lie at the heart of an effective education which has learned the lessons of the war. To these all other forms of instruction are either introductory and ancillary, or complementary and interpretative. Literature, history, art, and philosophy will continue to preside over them all. . . . The doctrine of reconciliation between Ethics and Economics will include a study of how men have attempted to find ways and means of living together in harmony and helpfulness, how far they have succeeded, in what respects and to what extent they have failed, and how they may carry forward the great experiment of their own time to more fortunate results by making ethics, economics and politics not three distinct and mutually exclusive or contradictory disciplines but rather three aspects of one and the same discipline which is that of human life.

In an investigation which occurred recently in the New York *Times* [May 25, 1919], facts were given to substantiate the claims that in the colleges of the United States, "stress is being laid on the course which makes for better citizenship and service to the state rather than academic scholarship."[1] The same tendency is evident in secondary schools, already history ranks third in number of students enrolled. [208, 1917, p. 14.] English literature and rhetoric rank first and second, respectively. When one considers the fact that a short time ago Columbia College discontin-

[1] Of course it should be maintained that a pursuit of such studies does not preclude the acquisition of scholarship, for these studies advance scholarship as certainly as anything else.

ued its practice of requiring Latin or Greek either for entrance or for graduation and has recently established a general information course in the social sciences, this course to be required of all freshmen, it seems at least an indication that the center of gravity is shifting from the classics to social sciences. English has for some time in many places in the United States been the only subject required of all students, but it is being seriously proposed in many places that a certain amount of social sciences should be required of all students in the high school.

The social sciences have not developed such a prominent place for themselves in England, but the English are beginning to recognize their importance. The following quotation shows an attitude similar to that in America. "No sane man wishes to destroy the intellectual discipline of school studies, or imagines that complete comprehension of the industrial and political world is within the range of school boys; but the question may be asked seriously whether attention should be directed more fully to the way in which this civilization of ours has arisen, to the great social movements and recent triumphs of recent years, and to the immediate problems which will require special knowledge, fine temper, and trained judgment for their solution." [51, 447.]

It is not the aim in the United States to give a "complete comprehension" but the "aim of community civics is to help the child to know his community life, what it does for him and how it does it, what the community has a right to expect from him and how he may fulfill his obligations, meanwhile cultivating in him the essential qualities and habits of good citizenship." [127, 699.]

According to the Regulation for Secondary Schools for 1918 in England, history is the only one of the social sciences that has a place in the curriculum, but much of what is accomplished in the United States by the social sciences is attempted in England by modern languages, or "Modern Studies" as they are now called. The definition of such studies that was given by the Committee to Inquire into the Position of Modern Languages in the Educational System of Great Britain follows [43, p. xxiii]: "We shall use the term 'Modern Studies' to signify all those studies (historical, economic, literary, critical, philological, and others) which are directly approached through modern foreign languages. 'Mod-

ern Studies' are thus the study of modern people in any and every aspect of their national life of which the languages are an instrument as necessary as hands, and feet, and heart, and head."

It is thought that a simple study of the languages is no longer sufficient for the needs of modern international democracy. The Committee itself explains its position [43, 16]: "The study and practice of the use of language as a fine art is an admirable school of thought and taste. The study of literature, critical, aesthetic, or scientific, should not fail to develop imaginative sympathy, and it is one of the principal avenues to the knowledge of a foreign people. But the study of words as words, of language as language, of books as books, and the art of the language for its own sake, even altogether, form too limited an objective for Modern Studies at the university. These studies should be in the widest sense historical, and embrace a comprehensive view of all the larger manifestations of the past and present life of the people selected for study." [43, 16.] "Thus treated, the history and literature of a modern people may do for our own pupils what the literature of Greece and Rome have done for many generations of their most enlightened ancestors." [43, 30.] "The pupils who elect to specialize in Modern Studies should not confine themselves to authors whose merit has been approved by time. They should read chiefly the best but the new as well as the old. . . . If they read the authors from various periods with a receptive mind they will insensibly acquire that important part of historical knowledge which consists in familiarity with the manners, the ways of thought, the ideals, and all the atmosphere of a people as conveyed by its literature. But they should also receive by instruction the continuous story of the people since it began to be a people." [43, 29.]

The *Times Educational Supplement* [203, October 24, 1918] dreads the "possible degradation of modern languages to commercial and utilitarian purposes, no imaginary danger," but although the Committee claims that Modern Studies "subserve the purpose of industry and commerce" [43, 8] they make it plain that "it will not suffice to base the claims of Modern Studies solely on the practical needs of individuals or even of the nation. We need an ideal such as inspires the highest classical studies. The best work will never be done with an eye to material profit." [43, 16.]

In the United States there is a similar belief. "The study of foreign languages does not always, but it ought, do a great deal towards widening the mental horizon and deepening the intellectual life of the learner." [172, March 9, 1918, p. 279.] One other quotation will be sufficient to show the American position. "When a boy studies literary style, I would have him learn that language is the product of social living. I would have him think of the influence which spoken and written words exercise in moving men to action. I would have him study the printing-press and the United States mails. I would have him realize that without the mechanical appliances of modern life there could be no books or journals. The trouble with the present study of words is that very often the pupil has no outlook on the social group which is held together by language." [99, 161.]

The Content of the Course in Science Selected for Its Social Value

The same conception seems to be behind the teaching of science both in England and the United States. There are, to be sure, a few ardent enthusiasts of science who think of it simply for its utilitarian value. Then there are others who recognize that there are both useful and cultural elements in science and that it should be taught in such a way that each of these values may be attained. In other words, science must serve a higher motive than commercial and trade relations. Benson says [15, 134–5] that "there is something horrible and terrifying in the doctrine so often preached, reiterated of course by speaker after speaker at the 'Neglect of Science' meeting, that science is to be preferred because of its utility. If the choice were between dead classics and dead science, or if science is to be vivified by an infusion of a commercial utilitarian spirit, then a thousand times rather let us keep to the classics as the staple of education."[1] On the other hand, the scientist claims that "it is hard to get into the mind of the classical headmaster the fact that the man of science is fighting for the broadening of the basis of education." [203, May 2, 1916, p. 61.]

[1] Since this was written, however, the ultra-radical claims of science as well as of all subjects have been toned down by the conferences which resulted in the production of Sir F. G. Kenyon's book, *Education, Scientific and Humane.*

Matthew Arnold, long ago when the controversy between the classicists and the scientists first became acute, made the statement that "so long as the realists persist in cutting in two the circle of knowledge so long do they leave for practical purposes the better portion to their rivals, and in the government of human affairs their rivals will beat them." [138a, 165.] There seems to be a growing realization that this is the case. For "all would agree that 'humanistic' studies should be scientific and 'scientific' studies humane." [173, 389.] It is now thought that the facts of science "become significant and even useful only when they are used to illuminate a right view of the purpose of the life of man." [203, March 7, 1916, p. 33.] Natural science should, therefore, not be substituted for the "humanistic" studies but should be complementary to them. [110, 11.] The Committee on Science complained that "much is given to a narrow classical education that does not lead to national service" [203, April 18, 1918, p. 169] and it was their belief that "a better service can be done and a like refreshment gained by those whom we hope to see educated on the wider lines, laid down in our Report. The humanizing influence of the subject has too often been obscured. We are, however, confident that the teaching of science must be vivified by a development of its human interest side by side with its material and mechanical aspects, and that while it should be valued as the bringer of prosperity or power to the individual or the nation, it must never be divorced from those literary and historical studies which touch most naturally the heart and the hopes of mankind." [44, 19.] The Committee says later in the Report [44, 23] that "up to the age of 16, the Science taught should be kept as closely connected with human interests as possible." Therefore, instead of a conflict between the humanities and sciences, science has now been included among the humanistic studies, because it touches life at all points. [110, 5.] This conception is also brought out in the following statement [203, March 7, 1916 p. 33] "Science may be a way of seeing the wonder and glory of the universe, or it may be a way of making money, or it may be merely making 'stinks.' We want it to be the first of these and not the second and third; but we want everything else to be the first of these also."

To accomplish these purposes science will not be taught simply as so many facts and experiments for the pupil to perform but the

influence of science on civilization will be a chief part of the study of science. For it is thought that "all branches of science can be taught so as to indicate the principles of scientific method, and thus secure a proper scientific training. If, therefore, the work in addition have a definite direct relation to the present day life of man, so much the better." [51, 448.] This will give the pupil an insight into the part that science may play in producing progress. The lives of great scientists and how they went about their work will be a legitimate part of the course, thus giving a comprehensive conception of scientific method. "Read Archimedes. Read the researches of the heroes of science. Read Faraday's papers. Take his papers on electrolysis and mark the long procession of experiments, the number and wonder of the stuffs, the diversity of methods, the trials, failures, uncertainties, doubts and suggestions, the atmosphere of discovery. Read his electromagnetic researches and watch the belief, patience, openness of mind, inventiveness." [117, 213–14.]

Such a study would be humanistic in the truest sense of the term. Science in America has similar aims. "The indispensable counterpart of science teaching as a means of grace and growth is the master calling of living, in both of its aspects the individual and the collective." [172, Vol. 7, p. 662.] "The expansion of the course upward into the study of life—and especially of man and his relation to his environment—is a big step in advance." [150a, 707.] "The aim is to familiarize the pupil with his environment and with the laws which govern the world; to teach him principles by a study of natural forms, that he may be master not only of himself, but of the resources supplied him." [92a, 796.] "It is to be studied in institutions like this which aim at contributing to the perfecting of the individual, not because it helps to explain the world we live in, to make nature more intelligible, and to teach the pupil to grasp one kind of truth." [172, July 20, 1917, p. 62.] "They need *less* the scientific thinking of meditation; they need most the scientific thinking of participation in the fundamental activities of modern life." [10, 11.]

The whole "General Science" movement may be said to be an attempt to give as far as possible a rational, orderly, scientific understanding of the pupil's environment. If it is to be a course in general science the human and social element is to be the unifying factor around which the course is organized. It is not to be a

selection of bits from various sciences. It is thought that no longer should the attempt be made to make every one a scientist but to give him an appreciation of his environment.

Content of the Course in Manual Training

Since the new conception of humanism includes *doing* as well as *knowing*, manual training and home economics have both become a part of the curriculum. The reason that manual training and not vocational education has been included as an integral part of the English program of studies is because manual training has come to be considered "an organic part of the educative process." Paton [15, 6] explains this position as follows: "The child is interested in things. It wants first to *sense* them, or as Froebel would say 'to make the outer inner'; it wants to play with them, to construct with them and along the line of this inward propulsion the educational process has to act. The 'thing studies' if one may so term them, which have been introduced into the curriculum, such as gardening, manual training, (with cardboard, wood, metal), cooking, painting, modeling, games and dramatization, are it is true later introductions, adopted mainly from utilitarian motives; and they have been ingrafted on the original trunk, being first regarded as detestable extras, but they quickly showed that they were an organic part of the real educative process; they have already reacted on the other subjects of the curriculum, and have, in the earlier stages of education become central. . . . *All this is part of the most important of all correlations, the correlations of school with life.*" (Italics not in the original.)

The following quotation sounds like formal discipline but behind it the same general idea prevails. "One of the developments which we need is the far freer use of manual and productive work as a means of education in the strictest sense; as a means, that is, of developing human faculty quite irrespective of the practical or commercial value of such faculty when developed." [198, 572.]

In the United States manual training is intended to develop social values just the same as other subjects are so intended. "When a boy takes a manual training course, I would not only have him study the tools and materials with which he comes in

contact, but I would also have him see that tools and materials are the instruments which human skills have employed in making possible a richer life for the community." [99, 161.]

The Content of the Course in Home Economics

In home economics there is the same movement, though some deplore the fact that it is not more widespread. In a review of a recent text-book on the subject the reviewer says [172, August 3, 1918, p. 148]: "The pages of this book show clearly that, in general, so-called home economics or domestic science consists essentially of the technical process of cooking and feeding, garment making and repairing, scrubbing and laundry work. There is hardly a hint of the child in the home, of social value, of civic relationships. It is recipes, and more recipes, cooking and more cooking with not a thought given to the intense industrial, commercial, civic, political and social changes which in recent years have shaken the very foundations of the home. . . . The same general comment may be made as to the education of girls for industrial and commercial pursuits. The narrow technical training will no longer suffice."

Judd's opinion is similar. It is not ability merely to cook and sew that is needed in home economics. It is the human side of cooking and sewing, a "broad outlook which sees in all domestic activity industrial society striving to meet human ends." [99, 163.]

The Classics Not Completely Socialized

It has frequently been claimed especially by the classicists that the practical tendency of the age is about to destroy the cultural subjects. On the other hand, quite as much complaint has been made that the classics, because they are technically taught, do not render service in giving an insight of rich significance into the present day life of man proportionate to the time spent upon them. They do not give a full life experience. The following quotations show the trend of the thinking:

> Perhaps no greater mistake in terms is made in our educational practice today than to say that the high school student who has had four years of Latin, three of Greek, four of English, two of ancient and medieval history, two of mathematics, and one year of mathematical physics has pursued a liberal-culture course of study. As a matter of fact, his course has been

narrowly technical in that it leads to but few selected occupations; and he is in no sense liberally educated, for he knows little about the modern world in which he lives. [47, 463. See also 186, 575ff.]

The classics in the colleges and universities ought, I believe to be taught far less as they have been in the past years from the point of view of philology, and more from the point of view of humanity, that is, of the thought of men as individuals and as communities, especially in their bearing upon present day civilization. [216a, 167.]

Those in whose keeping the classics are placed must fix their minds much more on matters of human interests, human conduct, and human feeling, and much less on matters of technical linguistic accuracy and skill. [33, 76.]

It is, therefore, fair to contend that the classics are not the only means through which humanism may be acquired, that although comparative philology may have been the first it is not the last word in humanism.

Since the social sciences and English by their very nature are best suited to the kind of treatment here represented, it is probable that they will constitute the leading subjects in the curriculum of the future. The classics are certainly losing ground both in England and in the United States, if the fact that both Oxford and Cambridge in England, and Yale and Princeton, the two strongest representatives of classical instruction in the United States, are receding from their strict requirements in Latin and Greek, is any indication. One need only make a comparison of the number of teachers of these subjects with their full classrooms with the number of teachers of other subjects with their enrolment, to see the drift of the times in the colleges and universities. The secondary schools sooner or later usually follow the lead of the higher schools. It seems certain, therefore, that in the future social studies will be prominent and that all others, whatever their chief characteristics may be, must be made to contribute to the dominant philosophy of the age, that is, socialization.

Certain Phases of Educational Method Demand That Subject Matter Be Socialized

Besides the preceding discussion the reasons for believing that subject matter will in the future be selected according to this newer conception of humanism are: (*a*) The controversy over the doctrine of formal discipline, so far as it relates to the curriculum,

is being settled on these lines. (*b*) The same is true as to the doctrines of interest and effort. These will be discussed in order.

One's philosophy of certain phases of educational method may influence the choice of subject matter in several ways. If the doctrine of formal discipline be accepted at its face value the subject matter chosen will be far different from that chosen by one who accepts the contrary belief that subject matter should be closely related to the needs of the pupil. Form will be stressed rather than content. If one accepts the doctrine of effort as opposed to interest the subject matter will be different from that chosen by one who thinks that effort should be reinforced and directed by interest. Also, if one denies in practice that pupils differ radically in their makeup, the content of his curriculum will probably be different in kind, and it will certainly be different in scope. Finally, if the fundamental principle of democracy, that of socialization, be accepted, then the subject matter chosen will reflect the desire to achieve this aim.

One of the causes of the failure of the traditional secondary school has been a widespread misunderstanding of the meaning of mental discipline, and in clearing up this misunderstanding one comes around to the view that subject matter should be selected according to the principles already enunciated. This misunderstanding has arisen from two sources. On the one hand, there has been a widespread belief in formal discipline. On the other hand, there has been an erroneous and narrow interpretation of the contrary position. In either case the work of the school has been narrow and specific. Those who have believed in formal discipline have thought that there are certain subjects better suited for the training of the mind than others. Hence they tend to disregard content. As formal discipline has usually gone hand in hand with the traditional curriculum, life in a modern democracy has had little place in the work of the school. Present social and political needs, local, national and international, have not been taken into consideration. The only concern for secondary education was, so the advocates of formal discipline thought, to bring the mind to a keen cutting edge and all other things would be added unto it. The development of insight into the meaning of present conditions was not a concern. The outcome of this belief was that a few subjects, and they usually of the traditional type, have monopolized the curriculum, and have been taught in

a narrowly technical manner. (See quotation from Cubberley above, pp. 128.)

It is true that disciplinary values have also been claimed at times for almost every one of the secondary school subjects. Whenever this was done, however, it was prima facie evidence that there is the same lack of connection between the content of these courses and life outside of school, as was noted in the case of the traditional curriculum. The purpose of the teachers of these subjects under such conditions has not been democratic needs but to impart subject matter disassociated from a social content. Whenever this is the case, even literature, art, and religion "are just as narrowing as the technical things which the professional upholders of general education strenuously oppose." [56, 79.]

The work of the school will also be inadequate if the opposing position is too narrowly interpreted. The revolt against formalism is so strong that the rebound carries far toward a narrow specific discipline. Although the doctrine of formal discipline attacked on the ground that it was devoted too exclusively to a few subjects and they not connected with life's problems, the advocates of specific discipline in trying to be specific have tended to set up aims that could be seen and counted. The needs of the pupil are interpreted to be only the apparent ones. The primary and immediate vocational needs are given undue prominence, and the less obvious needs of living with one's fellows, of taking one's part in the community in which one lives, of developing broad intellectual sympathies, are neglected.

Both sides of this controversy are coming more nearly to an agreement that subject matter should be selected for its social values. Traditional studies must be pursued more for the insight they give into social affairs than in the past. Gonzalez Lodge, [120, 111–121] gives a splendid account of the way in which Latin may do this. The specific disciplinists also claim that vocational studies (see analysis of Dewey's position in chapter IV), home economics and manual training may also do the same thing as was shown above. It seems, therefore, that so far as subject matter is concerned it is agreed that whatever concerns human beings will bring about the most general training. The following from Dewey [56, 77] will make the matter clear:

Such powers as observation, recollection, judgment, aesthetic taste, represent *organized results* of the occupation of native active tendencies with certain subject-matters. A man does not observe closely and fully by pressing a button for the observing faculty to get to work (in other words by 'willing' to observe); but if he has something to do which can be accomplished successfully only through intensive and extensive use of eye and hand, he naturally observes. Observation is an outcome, a consequence, of the interaction of sense organ and subject matter. It will vary accordingly, with the subject matter employed.

It is consequently futile to set up even ulterior development of faculties of observation, memory, etc., unless we have first determined what sort of subject matter we wish the pupil to become expert in observing and recalling and for what purpose. And it is only repeating in another form what has already been said, to declare that the criterion here must be social. We want the person to note and recall and judge those things which make him an effective, competent member of the group in which he is associated with others. Otherwise we might as well set the pupil to observing carefully cracks on the wall and set him to memorizing meaningless lists of words in an unknown tongue—which is about what we do in fact when we give way to the doctrine of formal discipline. If the observing habit of a botanist or chemist or engineer are better habits than those which are thus formed, it is because they deal with subject matter which is more significant in life.

. . . Wherever an activity is broad in scope (that is, involves the coordinating of a large variety of subactivities), and is constantly and unexpectedly obliged to change direction in its progressive development, general education is bound to result. For this is what 'general' means; broad and flexible. In practice, education meets these conditions and hence is general, in the degree in which it takes account of social relationships. A person may become expert in technical philosophy, or philology, or mathematics or engineering or financiering, and be inept and ill-advised in his action and judgment outside of his specialty. If, however, his concern with these subject matters has been connected with human activities having social breadth, the range of active responses called into play and flexibly integrated is much wider. Isolation of subject matter from a social context is the chief obstruction in current practice to securing a general training of the mind.

Dewey finds that the controversy over the relation between interest and effort may be solved in the same way, that is, by selecting subject matter so that it will be relevant to the normal activities of children, which means in the last analysis, that subject matter should be selected for its social values. "The remedy,"

says Dewey, "is not in finding fault with the doctrine of interest, any more than it is to search for some pleasant bait that may be hitched to the alien material. It is to discover objects and modes of action, which are connected with present powers. The function of this material in engaging activity and carrying it on consistently and continuously is its interest. If the material operates in this way there is no call either to hunt for devices which will make it interesting or to appeal to arbitrary, semi-coerced effort." [56, 149.]

It seems certain, therefore, that the subjects on which there is agreement of this nature will become prominent in the future. These subjects, or rather main fields, will, it seems now, be languages, English of most importance, social sciences, natural sciences, and vocational subjects, and in each of these the dominant aim will be to show its relation to the life of man.

In England the social sciences, as such, are not taking such a large part in the secondary schools, but in Modern Studies, as has been shown, the aim is to study the life of the people who speak these languages, both past and present, which is social in its nature. According to the Regulations for Secondary Schools for 1918 of the English Board of Education the subjects of study are to be: English, at least one language other than English, history and geography, science and mathematics, art and manual training. Just as in the United States these studies are to be pursued for the insight they afford into human relationships. The similarities between the English and American systems are close. The differences are that England values the traditional and the past more than the United States does and does not accord vocational subjects the place that the United States does.

CHAPTER VI

EDUCATIONAL METHOD

It has been shown in a previous chapter (Chapter II) that England and the United States are attempting to solve the problems of Educational Administration in accordance with democratic principles. In later chapters it was likewise shown that in the organization and selection of the Program of Studies they are attempting to keep the needs of democracy in mind. The third element of the educational trinity—Educational Method—is now to be considered. It too, when rightly conceived, has a part of its own to play in a democratic school system. That is, educational method has a part to play over and above the mere impartation of information.

The Function of Educational Method in a Democratic School System

To think independently, to meet life's situations unselfishly, to be capable of taking the initiative, to be original, to assume duties and responsibilities, are each and every one qualities which are considered desirable, if not essential in a well-rounded democratic citizenship. It is a correlative function of educational method in a democratic school system to provide a medium and regimen in which pupils are permitted and encouraged to develop such qualities, so that every pupil will be living in school a consciously social life wherein, as a contributing member, sharing constantly in socially educative group activities, he would be learning the lessons, seeing the vision and feeling the joy of citizenship within an intelligent and well-directed democracy. According to this conception educational method is not a mere device to be used as a means to some remote end. It may be a direct instrument of democratization, nay of the worthy life itself. It is insofar an end rather than a means. It is in this respect fundamentally an exemplification of the conception that living worthily day by day in school is within itself a legitimate aim; not, however, without the added belief that living worthily in school is the best preparation

for living worthily after one has left school. In other words, to express the same thing in more familiar terms, education is life itself rather than a mere preparation for life.

Educational Method in an Autocracy Contrasted with Educational Method in a Democracy

The ideal of education in an autocracy coincides readily at every point with the ideal of life in an autocracy, but hitherto the ideal of democracy has not coincided in every particular with the democratic ideal of life. Ordinarily our school government has been monarchical rather than democratic. In an autocratic school system the pupil is trained in habits, attitudes and feelings that are suited to life in an autocracy, but in developing a conception of educational method that will serve as a direct instrument of democratization unthinking obedience to a merely external authority is an ideal inherited from former autocratic systems that still survives. It is, therfore, ill-adapted to modern conceptions of social relationships. During the Middle Ages emphasis was laid upon institutions as a means of shaping and curbing the individual. In every walk of life there was some external authority to govern and direct the actions of the masses of the people. In industry it was the feudal lord; in politics it was the king and his agents; in religion it was the Church. Under these conditions unthinking obedience to such external authority was a necessity. Not that these people accepted unwillingly such authority but that their souls had been stunted through the lack of opportunity for growth. Authoritarianism reigned supreme. The education of the young was in accord with the spirit of the times. Now, however, feudalism is dead. The last of the kings, at least in the old sense, are gone. Authority of this kind is everywhere on the decline and it is such authority that the allied nations have fought to overthrow. A new régime is the order of the day in the world outside the schoolroom, but the school, since it, as hitherto conceived, is a conservative agency, notoriously lags behind the process of development. Educational practices in a democracy have not kept pace with the democratic ideal of life.

Instead of such unintelligent obedience to a merely external authority as just described democracy must develop a more intelligent procedure, obedience to laws and principles well-tested and accepted. That is, democracy demands an informed rather than

an uninformed procedure. The prevailing rule of life in a democracy should be intelligent self-direction in a give and take of shared experiences. It is not a question of giving commands by some and receiving them by others, of obedience or disobedience, but intelligent co-partnership, for in a democracy the people must both make and obey the laws. In other words, as Judd says, [99, 164] "We must develop an educational system which will make many people of many minds and many abilities co-workers in an intelligent social order."

On the other hand, so long as people live in groups there will always be need of some way of coördinating their actions so that they may live in peace and harmony. Such directive agencies as the old in relation to the young, of the mature to the immature, of the knowing to the ignorant, will always hold an important place in society. Education is of necessity by the older and more mature for and to an extent imposed upon the immature. This means that the teacher must in some measure choose and decide for the pupil. However, the necessity of such guidance lends itself so readily to the natural disposition of those in authority to lord it over those under their control that it tends to develop into a system of total direction by the teacher, of complete and to a large extent blind obedience on the part of pupils. For this reason it is probable that autocratic practices are likely to hold out longer in the field of educational method than anywhere else in the whole educational program. Educational administration and the curriculum, since they are more formal and objective, invite corrective criticism and can more readily be put upon a democratic basis, but coercion and force of one kind or another still hold sway in many classrooms. Although subject matter may be selected with nice discrimination to the end that pupils may study *about* the kind of activities that should characterize a democracy, still at the same time this same subject matter is sometimes taught by methods that dogmatically impose it on them. This may be true however accurately the subject matter may have been selected to meet the needs of democracy. In other words, one may believe that pupils should be brought ultimately to live according to democratic principles but may afford them little opportunity in the schoolroom for living according to such principles, and may use the most arbitrary and dictatorial methods in realizing this hoped-for result. Whenever democratic policies or informa-

tion about democracy are thus imposed on others by autocratic means, whether in government or education we have one element of the educational process, method, facing in one direction, and the other, subject matter, facing in the opposite direction. They work at cross purposes.

English and German Practices Compared

Some of the English writers declare that this is the case in England. For a severe indictment of this kind of procedure the following is taken from the *Nineteenth Century*. [88, 970.] "It is here that we are weak as a nation, especially as compared with Germany. The German ideal of education coincides at every point with the German ideal of life. Our ideal of education, so far as we can be said to have one, is opposed to our ideal of life. As educationalists we believe in the type of education that Germany has idealized and transformed into a philosophy of life. We believe in dogmatic direction and the discipline of drill." This has reference to England but certainly is largely true as well of educational practices in the United States.

The following is in complete agreement with Holmes [203, October 17, 1918, p. 441]: "It is now too little perceived that it is not in virtue of science or knowledge of science or the application of them to this or that object that the Germans have grown strong. They had grown strong because they had set certain ends clearly before them and had sought and used the means by which those ends could be achieved. And, what is far more important, their ends had been coördinated, unified." Much has been said and written in explanation of Germany's strength. That offered by these two writers seems to have been accepted in certain quarters as assuredly the best.

In achieving these results Dean Russell of Teachers College is of the opinion that German methods have counted for more even than the content of the German curriculum. "In the making of Germans," he says [164, 120], "little weight is attached to the content of the curriculum. What one studies may have an important bearing on one's future career. The peasant attends one kind of school, the business man another, and the future scholar still another, but all must be made first of all Germans. It follows, therefore, that the secret of training for the common good is to be found in the methods of instruction rather than in

its *content*. Herein is a characteristic of German education which in its universality and thorough-going comprehensiveness is not approached in any other National system that I have ever known. The principle that methods of teaching and modes of discipline make the man, while what he learns determines his career, will surprise some Americans who have delighted to deride methods as a hobby of those who have nothing to teach. Their idolatry of German scholarship, moreover, would be more intelligible if they knew the significance of German methods of instruction."

Germany, therefore, had no such conflict in educational principles as that described by Holmes as characterizing the English educational system. Both the method and the subject matter worked harmoniously toward autocracy. The glory of the Fatherland, the benevolence of the ruling class, and the supremacy of the States were the main purposes of the curriculum. On the other hand, to train obedient subjects was the chief aim of educational method. "By example and precept, by persuasion if possible or by force if necessary, the German teacher attained the end to which his profession leads 'the making of God-fearing, patriotic, self-supporting subjects of imperial Germany.'" [164, 121.] The teacher's duty was to give instruction in subject matter that had been chosen for a special purpose. It is a significant fact that Froebel's philosophy of education with its emphasis on self-activity and initiative, desirable qualities in a democracy, early gained imperial hostility and has never made headway in Germany, but has found its greatest welcome in the democratic countries, England and the United States. As the "formal steps" of Herbart are especially well-adapted to giving instruction but not so well-adapted to developing self-direction and initiative the Herbartian methods have had much greater influence in Germany. These methods are admirably suited to an autocratic country. Since England and the United States aim to develop an educational method that is as well-suited to democratic ideals as the German methods were to autocratic ideals, Froebel's philosophy is being emphasized more and more as the years pass, but is as yet far from universal acceptance.[1] The main trouble with the German system was that its ends were un-

[1] The Herbartian methods had wide sway in the United States in the last quarter of the nineteenth century but in recent years what may in general be described as Froebel's conception of educational method has been in the ascendency.

wisely chosen. Germany wished to train "obedient subjects" not citizens. England and the United States desire most of all intelligent citizens not subjects, for the rise of democracy means among other things: (1) The development of one's personality so that he may choose wisely in accordance with the principle that one's conduct should be designed for the good of all; (2) The principle of the autonomous will, the inner acceptance of the outer rule. Can a school system develop an educational method of such a nature as to achieve these results?

Present Tendencies in Educational Method in England

If Holmes is right (see above p. 137) England has not yet developed such a conception of educational method. At least she has not consciously isolated those aspects of educational method that are as suitable for democracy as the German methods were for autocracy, and made them the working basis of the whole school procedure. The English are, however, beginning to realize that the corporate life of the school, exemplified since Arnold's time by athletics and self-government, can and should penetrate into other activities of the school. Thus J. L. Paton [15, 8] asserts with regard to its "wider applications, it is capable of transforming the spirit of the classroom activities as well as the activities of the playing field." This phase of English public school life has for decades been considered by some as the best part of English education. For it tends to put one mainly on his own resources but at the same time one's activity finds expression in a social milieu. "Personality, after all, is best defined as 'capacity for fellowship,'" and unless "he functions socially, the individual develops into eccentricity, negative criticism, and the cynical aloofness of the 'superior person.'" [15, 8.]

Another growing tendency bids fair to play a much larger part in English education in the future than hitherto. This is the "movement towards self-expression and self-development—postulating for the scholar a larger measure of liberty in thought and action, and self-direction than hitherto." [15, 7.] Of this movement Holmes is perhaps the leading spirit. Montessori is having considerable influence in the lower schools, the freedom phase of her work attracting most attention. This movement has the backing of the Workers' Education Association. "We believe," writes the Rev. William Temple [219, 325. See also article by

G. Bernard Shaw in the same], "that just as education is essential to freedom so is freedom essential to education."

On the other hand, England has her "duty and discipline movement" just as the United States has. Sir Dyce Duckworth thinks that [64, 334] "there is reason to fear that we are already suffering from too much independence granted to young people of both sexes, and I think we may note the fruits of this in American training which in the main are not exemplary for us in this country." The value of obedience is stressed by this writer but he does not give a comprehensive plan by which the democratic virtues of initiative and orginality are to be obtained.

It is thought by some of the English writers [15, 8], however, that round the movements "towards a fuller liberty of self-fulfilment, and towards a fuller and stronger social life the form of the new system will take shape and grow." "It is a happy omen for our democracy that both these complementary movements are combined in the new life of the schools. To both appeals, the appeal of personal freedom, and the appeal of the corporate life, the British child is peculiarly responsive." [15, 8.] Little further indication of a tendency has been found in English educational literature consciously to isolate such socializing principles as are prominent in athletics and self-government, and to build round them a working philosophy of educational method which will serve as a basis for every phase of education in a democracy.

Tendencies in Educational Method in the United States

John Dewey. Such is not the case in the United States, for there has for years been a strong and growing tendency in the United States under the leadership of Dewey, and more recently of Kilpatrick, to find an educational method correlative of democracy in society with the belief that education is life itself rather than a mere preparation for life, and that practice in democratic living is the best preparation for democracy. Dewey [56, 15] makes a distinction between "changes in outer action" and "changes in mental and emotional dispositions of behavior." It is the latter and not the former that is desirable in a democracy. A dog or a horse may be trained to undergo changes in outer action but hardly in mental and emotional dispositions of behavior. And a human being may be educated to do both. The danger is that one may be trained like an animal rather than educated like

a human being. "If a parent," says Dewey [56, 15], "arranged conditions so that every time a child touched a certain toy he got burned, the child would learn to avoid that toy as automatically as he avoids touching fire. So far, however, we are dealing with what may be called training in distinction from educative teaching. The changes considered are in outer action rather than in mental and emotional dispositions of behavior. The distinction is not, however, a sharp one. The child might conceivably generate in time a violent antipathy, not only to that particular toy, but to the class of toys resembling it. The aversion might even persist after he had forgotten about the original burn; later on he might even invent some reason to account for his seemingly irrational antipathy. In some cases, altering the external habit of action by changing the environment to affect the stimuli to action will also alter the mental disposition concerned in the action. Yet this does not always happen; a person trained to dodge a threatening blow, dodges automatically with no corresponding thought or emotion. We have to find, then, some differentia of training from education."

This fact constitutes the chief stumbling block to the development of a democratic conception of educational method. A pupil may be compelled to perform a certain task and sometimes desirable mental and emotional dispositions of behavior may accompany changes in outer action and the fact that this is so tends to encourage those who have a natural disposition to use force and coercion for the most part in dealing with the young. However, such desirable changes do not always take place when the pupil is under compulsion and even at times most undesirable dispositions result. As Dewey says [56, 31]: "His instincts of cunning and slyness may be aroused so that things henceforth appeal to him on the side of evasion and trickery more than would otherwise have been the case."

Dewey concludes, on the one hand, [56, 29-31] that "purely external direction is impossible"; that "in the strict sense nothing can be forced upon them or into them"; that to some extent, "all direction of control is a guiding of activity to its own end; it is an assistance in doing fully what some organ is already tending to do." On the other hand, Dewey thinks [56, 31] that "the control afforded by the customs and regulations of others may be shortsighted. It may accomplish its immediate effect but at the ex-

pense of throwing the subsequent action of the person out of balance. A threat may, for example, prevent a person from doing something to which he is naturally inclined by arousing fear of disagreeable consequences if he persists. But he may be left in the position which exposes him later on to influences which will lead him to do even worse things. . . . Those engaged in directing the actions of others are always in danger of overlooking the importance of the sequential development of those they direct."

Dewey seems to summarize his position as follows [56, 32]:

When others are not doing what we would like them to or are threatening disobedience, we are most conscious of the need of controlling them and of the influences by which they are controlled. In such cases, our control becomes more direct, and at this point we are most likely to make the mistakes just spoken of. We are even likely to take the influence of superior force for control, forgetting that while we may lead a horse to water we cannot make him drink; and that while we can shut a man up in a penitentiary we cannot make him penitent. In all such cases of immediate action upon others, we need to discriminate between physical results and moral results. A person may be in such a condition that forcible feeding or enforced confinement is necessary for his own good. A child may have to be snatched with roughness away from a fire so that he shall not be burnt. But no improvement of disposition, no educative effect, need follow. A harsh and commanding tone may be effectual in keeping a child away from the fire and the same desirable physical effect will follow as if he had been snatched away. But there may be no more obedience of a moral sort in one case than in the other. A man can be prevented from breaking into other persons houses by shutting him up, but shutting him up may not alter his disposition to commit burglary. When we confuse a physical with an educative result, we always lose the chance of enlisting the person's own participating disposition in getting the result desired, and thereby of developing within him an intrinsic and persisting direction in the right way.

Since this is so, a scientific attitude towards education demands a more enlightened procedure than the imposition of a line of conduct from above upon pupils. Dewey suggests two steps in developing such a procedure. [56, 16.]

"Setting up conditions which stimulate certain visible and tangible ways of acting is the first step. Making the individual a sharer or partner in the associative activity so that he feels its success as his success, its failure as his failure, is the completing step."

William H. Kilpatrick. The second step is easily recognized as essential in the development of morale, which is only another way of saying morals. No amount of force and compulsion can accomplish the results that morale can. Kilpatrick, who has given a more recent expression of the same kind of theory, names it "whole-hearted purposeful activity." In order that he may define more clearly the problem of educational method Kilpatrick describes the typical unit of the worthy life and then he organizes his conception of educational method around this ideal. He finds this typical unit, as was just said, to be "whole-hearted purposeful activity proceeding in a social environment." And since he is concerned more particularly with democracy he explains what he conceives to be the worthy life in a democracy. [112, 322.] "We scorn the man," he says, "who passively accepts what fate or some other chance brings to him. We admire the man who is master of his fate, who with deliberate regard for a total situation forms clear and far-reaching purposes, who plans and executes with nice care the purposes so formed. A man who habitually so regards his life with reference to worthy social aims meets at once the demand for practical social efficiency and of moral responsibility. Such a one presents the ideal of democratic citizenship. It is equally true that the purposeful act is not the unit of life for the serf or slave. These poor unfortunates must in the interest of the over mastering system be habituated to act with a minimum of their own purposing and with a maximum of servile acceptance of others' purposes. In important matters they merely follow plans handed down to them from above, and execute these according to prescribed directions. For them another carries responsibility and upon the results of their labor another passes judgment. No such plan as that here advocated would produce the kind of docility required for their hopeless fate."

Contrast this ideal of democratic citizenship with that expressed in the following quotation which seems to be a contrary position [71, 109]: "While it is true that citizens of a democracy need to be taught to think, it is even more important, especially in the present crisis, (this was written during the war) that they be trained to revere and obey." Reverence and obedience are of course not within themselves harmful. It depends upon what one reveres and obeys. For within any group of people there are

many characteristics and institutions that deserve reverence and obedience but many that do not deserve reverence nor should the commands eminating from them be obeyed. Pork barrel and boss rule are instances and if one be taught in advance to obey in general there will be many occasions where he will unnecessarily surrender his own initiative and responsibility to others. This is exactly what is not wanted in a democracy. For democracy prizes freedom more than docility, initiative more than automatic skill, insight and understanding more than capacity to recite lessons or to execute tasks under the direction of others. Democracy demands not obedience as a general rule of life but intelligent self-direction, intelligent choice. It demands a type of procedure that will furnish better citizens "alert, able to think and act, too intelligently critical to be easily hoodwinked either by politicians or by patent medicines, self-reliant, ready of adaptation to the new social conditions that impend." [112, 334.]

It cannot be said that we have ever attained a standard as high as this, for a large number of people, clerks, soldiers, school teachers and those who work for a salary are accustomed to taking commands from others and of executing tasks under their direction. It is hard to get them to take an attitude of initiative and originality, but initiative and the resulting responsibility are essential in a thoroughgoing democracy. If one is taught to revere and obey "by wholesale" as it were, rather than to use intelligent self-direction and choice, an educational procedure better suited to autocracy than to democracy would be retained—a position from which every effort should be made to escape.

Instead of this kind of procedure Professor Kilpatrick would have the pupil live in school, worthily engaging in purposeful activities and developing initiative now. This conception is seen in the following statement [112, 323]: "And if the purposeful act thus makes of education life itself, could we reasoning in advance expect to find a better preparation for later life than practice in living now? We have heard of old that 'we learn to do by doing' and much wisdom resides in the saying. If the worthy life of the coming day is to consist of well-chosen purposeful acts, what preparation for that time could promise more than practice now, under discriminating guidance, in forming and executing worthy purposes?"

There are those, however, who seem to fear the tendencies of

Kilpatrick's line of argument. It is their opinion that we have gone too far in the direction of freedom in education; that we stress rights and privileges rather than duties and responsibilities. President Hopkins of Dartmouth says [93, 613]: "We have as a people specialized so completely in recent years on claiming rights, that our senses of obligation and responsibility have become atrophied."

Bagley thinks that "contemporary education in spite of its prating about social efficiency is individualistic at basis. It talks of the common good, but it has no place for the concept of duty with its constant dread lest the child may by accident be required to do something that he does not want to do, it is generating among our boys and girls individualistic doctrines that no amount of pupil self-government and no multiplicity of socializing devices in the recitation can counteract or cover up." [6, December, 1914.]

However, when Bagley and Judd unite in making the following statement they seem to feel that there is no necessary contradiction between their position and that described above: "Our school system," they say [4, 323], "should reflect at every point the two fundamental and complementary principles of democracy—opportunity and obligation, opportunity for individual development, coupled with and paralleled by the obligation of the individual willingly to learn the lesson that all must learn in common if our democracy is to rest on a real community of ideas and ideals."

It seems from the preceding statement that the solution which this group reaches is that there should be a just balance between habit and deliberate choice, between authority and freedom, between discipline and individuality, between opportunity and duty. If this is true then it seems that there is no real antagonism between the positions of the two groups of thinkers. No American has made more of this social nature of education than has Dewey. He and Kilpatrick would, it seems, not object to this solution unless it carried with it the belief that in order eventually to acquire this balance the pupil should be subjected while in school to a total direction by the teacher. He must, they would claim, begin to live now the kind of life that it is desired that he later lead. "Learn to obey that you may learn to command" was a policy of an autocratic régime that they might the more

easily exploit a trusting people. This statement is contrary to the laws of learning, for one learns to do by doing, to command by commanding, to obey by obeying, not by doing the opposite.

Attempts to Place Educational Method on a Democratic Basis

There is no doubt that a great many American writers and teachers are convinced that educational methods should be a direct influence for democratization and are making attempts to bring this ideal about. In the new school it is expected that the pupil will do more of the thinking and planning, more of the talking and discussing, while the teacher "will restrict himself to a thoughtful stimulation and direction of the process." [64a, x.] All that is being done along the line of "socialization," "motivation," the "socialized recitation," "pupil self-government," the "problem" and "project" method, when examined in their theoretical justification is found to have this purpose behind it. Each of these movements has the purpose of developing the pupil for democracy in and by means of a democratic medium.

Of these proposals for educating pupils for democracy the *project method*, or the *purposeful act*, because it is more inclusive, seems to be attracting most attention at present, and since it is more inclusive it will be treated here as typical of the rest in ideals and purposes. It is more inclusive because a number of important related elements of the educative process are more completely unified in this concept. In the words of Kilpatrick who has more exactly defined the meaning of this method than any other the following is given [112, 320]:

> I began, he says, to hope for some one concept which might serve this end. Such a concept, if found, must, so I thought, emphasize the factor of action, preferably wholehearted vigorous activity. It must at the same time provide a place for the adequate utilization of the laws of learning, and no less for the essential elements of the ethical quality of conduct. The last named looks of course to the social situation as well as to the individual attitude. Along with these should go, as it seems, the important generalization that education is life—so easy to say and so hard to delimit. Could now all of these be contemplated under one workable notion? If yes, a great gain. In proportion as such a unifying concept could be found in like proportion would the work of presenting educational theory be facilitated; in like proportion should be the rapid spread of a better practice.

From this quotation it is evident that the project method is in harmony with the ideals that should characterize a democratic school system as described above. One of its main purposes is to alleviate the ill effects of an educational method poorly adapted to life in a democracy. It attempts to see clearly the ideal of the worthy life as described by Kilpatrick and to adapt means to ends in achieving it. Since the 'purposeful act' is the most essential element in the worthy life it becomes the basis upon which the project method is built.

Now the typical purposeful act is made up of four parts, "Purposing, planning, executing, and judging," and the pupil should as far as possible do each of these for himself. This requires a certain amount of freedom, for freedom is necessary if one is really and truly to purpose, plan, execute and judge. It is not a question, however, as to whether the pupil shall be left free to do any and everything he wishes. That would produce chaos and we should not get anywhere in that way. It does mean that the vital point of attack is the purposing of the child. Until the pupil really *purposes* in his heart to carry to completion a line of activity there is little hope of educating that pupil in that line. It is probably true that no one has ever really been educated in any line until he in some way either of his own free will did purpose to be educated, or was led by suggestions, questions or stimulations to purpose. After the child has in some way purposed, this purpose will give unity and coherence to his planning, executing and judging. The teacher's function then is to make his first and main point of attack on the purposing of the student. Get purposes going somehow, should be the watchword. Then the teacher should if necessary enrich this purpose. The same things may be said of the teacher's function in the pupil's plan. If the student is capable his plan will likely be rich in significance. If he is not so capable his teacher may need to render more assistance, in the form of suggestions, questions, stimulations, etc., but at the same time the teacher should take care that the activity of the child be not crushed or he come to depend too much on the teacher. The same will apply to the child's executing and judging. In other words, it is in the last analysis the child's purpose, the child's plan, the child's executing, and the child's judging that is important; but this does not mean that the teacher shall stand idly by and let the child go his own way. The teacher's rôle is to

enrich the meaning and significance of the activity, to encourage and assist. The balance is very delicately drawn. To work *with* and not *for* the child, to assist and not carry, to keep his activity, that is, his purposing, planning, executing and judging, at a high pitch and at the same time directed toward a well-defined end is the acme of good teaching.

It was said above that the main point of attack in all good teaching is the pupil's purposing and that the teacher should get purposes somehow or other. There are some ways, however, better than others for getting purposes. If a scale be drawn with utter compulsion at one end and "ethical identification with the group" at the other, with praise, approval, cajolery, flattery, fear, threats, etc., between, it would be found that those students who would have to be dealt with on the basis of utter compulsion would not be so easily educated as those at the other end of the scale, but if compulsion should prove the only means to get them to purpose then compulsion and coercion should be used. It should, however, be recognized that this is seldom the only means of dealing with pupils who have progressed farther along the scale. Just as high a means should be used as possible, all the time working toward the upper end of the scale. If the teacher as a rule appeals to the pupil on the basis of coercion and fear some of the pupils will be injured for they would be educated from a higher to a lower stage. It is the inability of teachers to see education in its totality that causes so much confusion. One appeals on the basis of coercion solely and all those pupils who might be appealed to on a higher basis will be pulled down to a lower level, while another is so afraid of the lower rungs of the scale that certain pupils go untouched and unmolested. This is perhaps the reason why there are so many conflicting opinions in regard to educational methods. One teacher stresses one part of the scale while another stresses another part.

There is no assurance that any and every teacher can get purposing, and there is none that if a teacher does get purposing the purposes will be worthy, but there is every assurance that if the pupil does wholeheartedly *purpose* all the factors for effective education are present.

The Purposeful Act as a Corrective of the Misconception of the Doctrine of Interest and Effort

When the project method is examined for its possible results one finds that it tends to remedy many of the defects of the traditional secondary school, and since it proceeds in a social environment it also educates the pupil for group life, for coöperation, and hence for democracy. One of the causes of the failure of the traditional school has been due to a misunderstanding of the relation of "interest" and "effort" in education. Another has been the widespread belief in the doctrine of formal discipline. It can be shown that the project method will eliminate many of the defects of school practice. As regards interest and effort there has been too much dualism between the two in the thinking of school men. Those who advocate interest have too often been unable to see anything but "drudgery" and "disagreeableness" in a doctrine of effort. They forget the possibility of entering wholeheartedly into an undertaking, as Edison did when he was inventing the electric light, or the engineers did while they were inventing the Liberty Motor. It is exactly under such conditions that true effort is best found. Those who contend for the traditional curriculum are to some extent to blame for this attitude, for they have too often claimed as one of the virtues of this unattractive subject matter that it required hard work, effort, "uncoaxed and uncomplimented." They leave out the purposeful part of the activity.

On the other hand, the advocates of effort have felt that the doctrine of interest would lead inevitably into "soft pedagogy." They do not wish the pupils to be "fed with a spoon." They too forget that a pupil may enter wholeheartedly into an activity and in so far are anxious to push the work themselves. This statement is repeated because it is in wholehearted purposeful activity that each side may find the solution to the difficulty. Certain shortsighted advocates of the doctrine of interest have to a large extent been to blame for the attitude of their opponents. They have tried to make subject matter selected without any regard to its suitability for the pupil's stage of development or without relation to those things with which the pupil is familiar the basis for schoolroom procedure. Having selected the subject matter with a view to its supposed future usefulness they

have then proceeded to find devices by which the pupil might be instructed as easily as possible in this subject matter. In this way they have tried to "make it interesting" for the pupils. They have "sugar-coated"; they have amused; they have entertained; and when the pupils seemed interested, they took it to be a sign of success, forgetting that they seem just as interested at a vaudeville theater. These misguided teachers have thus selected all kinds of devices by which the pupil might get along with as little effort as possible.

Interest and Effort are Mutually Complementary. There has too often been a thorough misunderstanding of the relation between these two aspects of method, instead of seeing that the two are really complementary aspects of the same on-going movement, that true interest is the sign of real motive and should in turn mean more effort. This is but the same tendency conceived as pushing ahead in the face of difficulties and should result in worth while purposes. From such a procedure joy and happiness will result, and be an impetus for still more effort. The tendency has been to make the two antagonistic to each other, but as a matter of fact they are supplementary to each other. In explanation, take the case of Edison inventing the electric light. No one doubts that he worked, and worked hard, that he put forth effort as few men can. The motive force back of it all was, however, one with his absorbing interest in the subject, so absorbing that he forgot everything else. In other words, his interest created effort, and effort put forth to accomplish a definite purpose brought with it satisfaction at work well done, thus arousing more interest which created more effort, etc. This is wholehearted purposeful activity.

This is the view of interest taken by Dewey. "To be interested," he says [56, 148], "is to be absorbed in, wrapped up in, carried away by, some object. To take an interest is to be on the alert, to care about, to be attentive. We say of an interested person both that he has lost himself in some affair and that he has found himself in it. Both terms express the engrossment of the self in an object."

This is not the view of interest that those have in mind when they speak of interest in a depreciatory way. Interest is then taken to mean "merely the effect of an object upon personal advantage or disadvantage, success or failure. Separated from

any objective development of affairs, these are reduced to mere personal states of pleasure or pain. Educationally, it then follows that to attach importance to interest means to attach some feature of seductiveness to material otherwise indifferent; to secure attention and effort by offering a bribe of pleasure. This procedure is properly stigmatized as 'soft' pedagogy; as a 'soup-kitchen' theory of education." [56, 149.] Dewey adds [56, 150]: "To make it interesting by extraneous and artificial inducements deserves all the bad names which have been applied to the doctrine of interest in education."

The project method since it proposes to make wholehearted purposeful activity the basis for educational procedure makes easy the elimination of this dualism between interest and effort. For no one can be both wholeheartedly and purposefully active without becoming engrossed in the activity, that is, without being interested in his purpose to the extent of working at it with all his might. In other words, it would not be interest to the neglect of effort and vice versa but both to maximum degree. There is no real antagonism between the two, but through interest the pupil persists in the face of difficulties, that is, he puts forth effort, while difficulties successfully overcome result in satisfaction and keep the interest at a high pitch all the time.

From the standpoint of a purely mental and psychological development there is little doubt that this is true, but the race has placed, and continues to place, such value upon certain attainments that all would agree that those things must be attained at any cost. It is conceivable though not probable that a pupil might be better developed mentally at the age of fourteen if he should not stop to learn to read and write, but few educators would be willing to take the risk. Society demands reading and writing. Suppose now that one's purposing, one's native interests, never led a pupil into reading and writing. The question thus developed is not, therefore, one of effort for all agree to that. The question is whether the pupil's native interests, needs and present powers shall be a factor, and to what extent a controlling factor in determining what the pupil shall do in the schoolroom; shall we attempt to use the interests and impulses which already move a pupil to action or disregard them? One side would say that a pupil should learn to do what he ought to do when he ought to do it, whether he wishes to or not. This

side may go so far as to say that the pupil should learn to wish to do what he ought to do when he ought to do it. President Lowell of Harvard is, for instance, of the opinion, that "every young man needs to acquire a habit of concentration, and a devotion to purpose without considering too much whether he enjoys the process, or whether he himself always perceives at the moment its direct relation to what is to come afterward. . . . He must learn to put forth effort, because he has faith in the end to be attained, not because the means to that end suit his taste." [120a, 621.]

And further in the same article [120a, 621] he says: "A man's education ought to teach him not to seek for the things that will entertain or interest him, and avoid others; but to take an interest in, and throw his force into, whatever is best for him to do."

Lowell here seems to consider that the pupil's interests are not the true basis for the selection of subject matter. He would, however, consider it fortunate if the student might select in line with his interests and felt needs rather than contrary to them. He would only contend that the pupil's interests should not be the final basis for determining the activities in which he should engage.

On the other hand, Eliot is of the opinion that the surest way of eliciting effort is to take advantage of interests which the pupil already has. He says [66, 360], "that power to apply one's self and to work hard mentally is the main object of education; but nearly everybody also has come to know that inspiration or stimulation of interest in any mental work will produce this power to work hard more quickly and more thoroughly than any driving process, no matter what the means of compulsion—rattan, ruler, staying after school, holding up to ridicule, deprivation of play or holidays, or copying pages of French or Latin." Nothing has been found in this investigation to indicate that educational leaders hold a different view.

Dewey is of similar opinion, as appears in the following [60, 23; and 34–35]: "I know of no more demoralizing doctrine—when taken literally—than the assertion of some of the opponents of interest that *after* subject-matter has been selected, *then* the teacher should make it interesting. This combines in itself two thoroughgoing errors. On one side, it makes the selection of subject-matter a problem quite independent of the question of

interest—that is to say of the child's native urgencies and needs; and, further, it reduces method in instruction to more or less external and artificial devices for dressing up the unrelated materials, so that they will get some hold upon attention. In reality, the principle of 'making things interesting' means that subjects be selected in relation to the child's present experience, powers, and needs; and that (in case he does not perceive or appreciate this relevancy) the new material be presented in such a way as to enable the child to appreciate its bearings, its relationships, its value in connection with what already has significance for him. It is *this bringing to consciousness of the bearings of the new material* which constitutes the reality, so often perverted both by friend and foe, in 'making things interesting.'"

He says further [60, 34–35]: "The mistake . . . consists in overlooking the activities in which the child is already engaged or in assuming that they are so trivial or so irrelevant that they have no significance for education. When they are duly taken into account the new subject-matter is interesting on its own account in the degree in which it enters into their operation. The mistake lies in treating these exciting activities as if they had reached their limit of growth; as if they were satisfactory in their present shape and simply something to be excited; or else just unsatisfactory and something to be repressed."

The Purposeful Act as a Corrective of Misconceptions of Discipline

The project method will also go a long way toward eliminating another of the causes of the failure of the traditional school. This is the widespread faith in the value of coercion and driving generally. The question of the value of military training and discipline, has, as might have been expected, come prominently to the fore during the war. It was noticed how much could be learned in a short time under military organization, and the natural conclusion was that by driving and compulsion more could be learned in the same time than in any other way. Those who held this position failed to take all the elements into consideration. In the first place there was a definite purpose in mind which the soldier understood and appreciated. To accomplish this purpose the soldiers entered wholeheartedly into their work. There was a strong "inner

urge" animating those in training. The mind 'set' of the soldiers was an item that could not be disregarded. The military organization was only a framework in which this 'inner urge' might express itself. As soon as the armistice was signed there was a sudden change and no amount of driving and compelling was as efficacious as before. There was not such rapid learning after that. [113, December 1, 1918.]

The final decision on this question of discipline will, it seems, be very much the same as wholehearted purposeful activity. By the project method, so its advocates think, the pupil's mind will be disciplined in the only way in which a mind can be disciplined, that is, by engaging it in purposeful acts; at least, disciplined for the kind of life needed in a democracy. The very nature of democracy requires that its members shall have purposes and be free to plan how they may carry their purposes into execution, so long as their purposes and plans are in line with the good of the whole. Democracy demands a constructive program of all its members. In other words, the only kind of discipline that is worth while is that which enables a person to "purpose, plan, execute, and judge" in a social environment. At every step in working out a project the student must think, and hence, the type of activity proposed by the advocates of the project method is essential in developing the kind of mental training suitable in a democracy.

The issue, therefore, in the question of educational method in a democratic school system is not whether there shall be *effort*, vigorous, wholehearted effort. All agree to that. The issue is how to secure it. One side would select activities and problems of such a nature as to get the pupil engrossed and wrapped up in his work. They believe it more probable that vigorous activity will more likely be secured if the native tendencies, interests and needs of the pupil are made use of. The other side seem rather to believe in the dead lift of the will. The pupil must do some things in life that he does not want to do and, therefore, he should practice now so they contend. The former would say that this does not achieve the desired results, unless beginning as a disagreeable task it quickly develops into a genuine case of wholehearted purposeful activity. Otherwise what Thorndike calls the law of effect is disregarded. Going through a task against the grain may produce an attitude of distaste and permanent annoyance.

and hence of idleness and laziness. Practice under such conditions does not make perfect. If the pupil has been practiced in seeing the various possibilities of his purposes and plans in their fulness, of becoming engrossed and wrapped up in the development of his purposes, then, so it is thought, he will develop the habit of looking for such a state of absorption in all he undertakes. "There were many interesting things in working out the other project, I guess they will be here too," will be the pupil's attitude.

The development of such an attitude as this is what Kilpatrick calls [112, 326] a concomitant value of the project method. Other such values may also result, such as, faith in one's ability to carry to completion an activity once it is undertaken; the determination not to be overcome by an obstacle; patience; endurance in the face of difficulties. This may still not be the total possibility of the project method, that is, of wholehearted purposeful activity, but it takes into consideration much more than the mere primary responses that are necessary for the bare completion of a task. Whether or not the pupil will thereby be developed in ideals of "duty and discipline" may remain a disputed point, but the advocates of the project method see no conflict between the ideals of a freer development and that of duty and discipline. In fact they expect a better sense of duty and a more intelligent discipline to be developed thereby. At least they think that the educational outlook from such a procedure is much broader than will be the case when a doctrine of discipline, especially of the formal type, is rigidly adhered to; and also when the position of specific disciplines is too narrowly interpreted. The project method when so conceived is not a device to be used as a means to an end. It is a fundamental conception of the right way to live. One is preparing for democracy by living in a democratic manner day by day. That is education, is life itself, rather than a mere preparation for life.

It will be a great gain for democracy if an educational method for secondary schools can be developed so that pupils may be educated in the schools to the point that they will be sufficiently intelligent to take their places as efficient citizens in a democracy. This will require, not servile obedience to another, thus leading the way to exploitation, nor yet a capricious regard for one's own whims and passions, thus breaking down every possibility of a strong system of coöperation among the members of democracy,

but an intelligent self-direction and an intelligent coöperation; both a give and a take in a shared experience. Both England and the United States seem inclined to search for an educational method as well suited for democracy as Germany's was suited for autocracy, but at present such attempts seem to be still in the experimental stage.

CHAPTER VII

THE MEANING OF SECONDARY EDUCATION IN A DEMOCRACY

Changes of widespread influence are taking place in the program of secondary education as regards Educational Administration, the Organization and Selection of Subject Matter, and Educational Method as shown in previous chapters. These changes, in some cases even to the point of confusion, are taking place in every sphere of educational activity especially in the United States. In England the situation has been more stable, but even there old ideals are breaking down. In the United States change is the ever present rule in every walk of life, and adjustment to changing needs is the outstanding feature of the educational situation. President Hadley, in describing the American situation, has said [84, 107]: "We have never been quite sure what was required or expected of our high schools and colleges. We were in the position of a rifleman shooting at several different targets and never definitely deciding which one he should try to hit." Consequently, new principles have been promulgated, new standards set up, new plans made, and principles, standards and plans scrapped together and a new start made. [161, 370.]

As a result of this ever present tendency to remodel the school program all kinds of educational policies and all kinds of educational practices have been advocated. Only one item in the philosophy of secondary education in the United States seems to be definitely fixed and settled. This is universal free secondary education, which if accepted inevitably leads to wide diversity in educational practice, unless guided by a clearly conceived and definitely stated philosophy of secondary education. This is exactly what we do not have either in England or the United States. [141, 261. Also 14, 1293.]

A Comprehensive Theory of Secondary Education in the Making

The philosophy of secondary education is not yet made but in the making. Confusion in educational ideals and values must

be added, therefore, to the other indications of a confused state of affairs in educational matters. Fortunately, a new philosophy of secondary education is developing but before it takes final shape, many traditional ideals and customs will have to be recast so that they will be in harmony with the needs of democracy. The old conception of a liberal education and of culture must be reformulated and such reformulation is taking place. The whole conception of humane studies must be re-examined, and new aims and new standards must be set up to the end that the results attained may be not less but more cultural, not less but more humane.

Considerations presented in the preceding chapters indicate that the education of the future will be based on a new conception of the place and function of education in a democratic society. This new conception of education has been variously termed "new humanism" or "social efficiency" or even as "education for human ends broadly conceived." The name is of little significance, the conception is all important. There are three main characteristics of this conception. (*a*) From the social standpoint the education of the future is to be an engine of social progress rather than a mere transmitter of the heritage of the past. (*b*) Its dominating purpose is an intelligent participation in contemporary life. (*c*) From the standpoint of the individual, education is to be conceived as a process of growth or as "activity leading to further activity." These characteristics constitute a conception of education that purposes to make of itself the conscious directive agency in building a new civilization based on democracy. Its ideal is the past and the present and the future for social service. It purposes mainly, however, to build a civilization rather than to admire past civilizations.

Building a Worthy Civilization as an Aim in Education

This new conception of humanism is just as much concerned about human beings as any other conception of humanism. Perhaps it would be safe to say that it is even more concerned than other conceptions as it recognizes the welfare of all classes of people. In fact, it will include all those things of interest to man, all that makes for human welfare to-day, and will attempt to make all such activities significant to pupils in the present. All subjects will be treated so as to develop an insight into human

relationships, human interests and human needs. This conception will not, as the term "humanism" might indicate, necessarily favor the classicist or the "humanist" so-called, because a program of study selected by them may unduly emphasize the remote past at the expense of the near past and the present, of the acquisition of information at the expense of constructive thought and activity. It will not necessarily rule out of consideration the vocationalist, for trades, vocations, industries and occupations may be pursued because such studies when pursued for their social significance may enrich very markedly one's understanding of a most important part of the life of man. (See exposition of Dewey's views in Chapter IV.) It will rule out each of these groups whenever the type of education advanced by them is not designed for human ends broadly conceived. "Education for human ends broadly conceived" is only another way of expressing the new conception of education here under consideration. It is thought that a subject is worthy of study only as it has this broad outlook and that all subjects that are worth teaching at all may and should be taught so as to bring out their human relationships.

So far there is no difference between this conception of humanism and any other, but it does not, as the older conception of humanism did, revert to a past age for its inspiration. One writer explains the difference as follows [213, 670]: "The 'new humanism' that is needed in the twentieth century differs in several respects from the humanism of the Renaissance. In the first place, the men of the Renaissance had to return exclusively to the life of the Greeks and Romans to find worthy cultural achievements to study and emulate. We now have in addition the cultural achievements of recent centuries."

This in part explains the difference between the new and old conceptions of humanism but it does not go far enough. The new conception is anticipatory rather than reminiscent, and it hopes to refine the social heritage as it transmits it. The tendency to revert to the past for one's inspiration explains much of the condemnation of the present age for its industrial and commercial tendencies. When such condemnation is made, present crude conditions are compared with past accomplishments. The ideal of civilization that such men had was so colored by what they knew of past ages, that they tended to emphasize the crudeness of the present and to idealize the attainments of the past. They

did not emphasize the possibilities for future development; that is, what was capable of becoming. They admired the gems that had been polished and brought to perfection. They did not see the diamond in the rough. The following is a case in point. It is claimed [15, 1] that the nineteenth century "with all its brilliant achievements and scientific discovery and increase of production was spiritually a failure. The sadness of that spiritual failure crushed the heart of Clough, turned Carlyle from a thinker to a scold and Matthew Arnold from a poet into a writer of prose."

There is no doubt that the nineteenth century did create a situation different from any in the world's history and that there was much in it that fell short of spiritual ideals but there is likewise no doubt that out of that situation there were possibilities for developing as high a degree of culture and civilization as the world has known. If it was spiritually a failure it was because there were certain forces at work which could not be, or were not, directed to the accomplishment of this purpose. The conception of education that is here under consideration proposes to find out what these forces are, to get them under control, and direct them toward the attainment of human ends. Its chief emphasis is on building, on becoming a directive agency for social progress.

Dewey agreeing in the main that the present age is crude, that we have "no culture of our own" and "can neither beg nor borrow one without betraying both it and ourselves" declares that there is nothing left for us to do but to build one of our own. The beginning of such a culture "would be to cease plaintive eulogies of a past culture, eulogies which carry only a few yards before they are drowned in the noise of the day, and essay an imaginative insight into the possibilities of what is going on so assuredly although so blindly and crudely. . . . To transmute a society built on an industry which is not yet humanized into a society which wields its knowledge and its industrial power in behalf of a democratic culture requires the courage of an inspired imagination." [55, 215.]

Judd seems to be in complete agreement with Dewey's position. "Our modern humanism after the great war will not turn back to civilizations of the past, for there was no true democracy in earlier days. We must build in the future a social structure for which there is no pattern. The humanism of the future will be dependent, not on imitation, but on self-determination." [99, 161.]

Such an ideal is exactly what must be accepted if education is to be an engine of social progress rather than a mere transmitter of the heritage of the past. This would make education anticipatory, forward-looking rather than reminiscent. Those who accept this conception would claim that our age is crude not because we have not studied about past ages but because we have not learned that every great age of culture has made its education anticipatory rather than reminiscent. They have built their civilization out of the heart of the present with a look to the future. Only by meeting their present problems as well as and as skillfully as they could, have they been able to develop a high degree of culture. This was true of the Periclean Age, the Gothic Builders, the Renaissance. The same is true of any age.

Social Participation as an Aim in Education

The quotations from Dewey and Judd show that social progress, social building, is the aim of the new conception of education. To achieve this broader aim social participation in contemporary life is necessary. Mr. Cloudesley Brereton [26, 1310] asks this question: "When will people remember that the intellectual and the aesthetic sprang originally and is forever springing out of the utilitarian, and that all art and intellect which are not constantly renewing their contact with the utilitarian and with daily life must inevitably perish of pernicious anaemia?" This is taken to mean that education should make the present its point of departure and that building from the present to the future should be its main purpose.

Mr. A. Clutton-Brock states that "functional" beauty precedes and is the origin of "artistic" beauty and enlarges upon this position as follows: "But how does this functional beauty come into objects of use?" he asks [39, 74] and answers the question as follows: "It comes when those objects are designed as well as they can be designed for their purpose, and made as well as they can be made. It is the result of science and of labor that spare no pains in a practical task. And then the man of science turns into the artist because he recognizes beauty and values it. It is the reward of his work, and expresses his thankfulness for it and his delight in it is his art. So it was with the great Gothic builders who were impelled on by their passion for their own science of building and who gave thanks for the beauty of that science in

their art." Again he says [39, 76]: "It is always out of works of utility, achieved as well as they can be achieved with the best conscience of the designer and the workman, that beauty grows, just as it grows out of the utilities of nature"; and [39, 75] "We never think of the engineer as the man who ought naturally and inevitably to become an artist. The artist, in the arts of use, is to us one who designs not objects of use so much as ornament. If he designed plain objects of use perfectly fitted for their function we should not think of him as an artist, even tho he laid the most exquisite and delighted emphasis on their functional beauty."

Bonser has expressed a similar view. "We have about learned," he says [21, 159], "that we do not get culture by the study of culture subjects. Culture is rather the quality and refinement and richness of daily life as it is lived in occupation, in citizenship, in the home, in hours of leisure."

Mr. Clutton-Brock has isolated for emphasis certain elements which are vital to the new conception of humanism. "It (functional beauty) comes when those objects are designed as well as they can be designed for their purpose, and made as well as they can be made." "It is always out of works of utility, achieved as well as they can be achieved with the best conscience of the designer and the workman, that beauty grows." These statements are exactly in accord with those of Dewey and Judd. These are the elements that have always made for growth and development in the past. Our museums have great numbers of works of art from the silversmiths and goldsmiths and other workers of the Middle Ages which are admired even to the present day just because they were "designed as well as they could be designed, and made as well as they could be made." The new conception of humanism makes its attack at this point. It proposes to build a civilization no less worthy than that of any past age. Pupils will be trained in school "to do better in life what they are going to do any way," and out of this kind of procedure a higher civilization will inevitably grow.

Add to these two items the expressions "functional," and "designed for their *purpose*" and the core of the modern conception of humanism is given. One's work is to be done as well as it can be done, it is to be purposeful, and it is forward looking rather than backward looking, that is, it is building as well as it can in the present for the future. Such a conception requires that educa-

tion be constructive as well as informational, that participation in contemporary life be a vital concern of education. Participation of course implies intelligent comprehension. In the past the definition of humanism came to be almost, if not quite, synonymous with "a knowledge of the best that has been said and done in the past," and at times it was narrowed still more to include only the remote past. When such was the case education was not *functional*, it was not purposeful, it did not always enter into contemporary life. There was a dualism between works of art and works of utility; between labor and leisure. Such a definition would inevitably develop sooner or later a belief in art for the sake of art, or knowledge for the sake of knowledge. It would not be functional or purposeful.

Art for Art's Sake Unsatisfactory as Aim in Education. Such a definition does not satisfy modern democratic needs, first because it does not include building as we have seen; secondly, because it does not include social participation but makes information or knowledge the sole criterion of culture. It puts no emphasis on doing and hence tends to exclude the working class from the cultured group. It is a survival of past conditions when society was divided into laboring and leisure classes; but in a democracy there should be no such cleavage. A leisure class has no place in a democracy. It is demanded that every one should do something in the world's work, hence doing is now included in the conception of humanism. By the older conception of humanism one's daily work, except in favored professions, was considered to have no cultural value.

"Dislike to employ scientific knowledge as it functions in men's occupations is still a survival of an aristocratic culture. The notion that 'applied' knowledge is somehow less worthy than 'pure' knowledge, was natural to a society in which all useful work was performed by slaves and serfs, and in which industry was controlled by models set by custom rather than by intelligence. Science or the highest knowing, was then identified with pure theorizing, apart from all application in the uses of life; and knowledge relating to useful arts suffered the stigma attaching to the classes who engaged in them." [56, 268.]

By the newer conception whenever one's work develops an insight into social meanings it is humane. Knowledge is then considered "humanistic in quality not because it is *about* human

products in the past, but because of what it *does* in liberating human intelligence and human sympathy. Any subject matter which accomplishes this result is humane, and any subject matter which does not accomplish it is not even educational." [56, 269.]

The conception of the function of education as building a new civilization is far different from the conception of education as "art for art's sake." The former requires that definite purposes, objectives be set up and attained. The latter sets up no purposes beyond itself. There was a time when this kind of educational thinking was prominent. Applied science was considered less worthy than pure science; vocation was less worthy than leisure; knowledge for use was considered less desirable for cultural purposes than knowledge for its own sake. Knowledge for its own sake and art for art's sake as conceptions of the aim of education still have considerable backing, especially in England, though they seem to be losing ground in favor of a more purposeful education. The following quotation is typical of this attitude. "What we want to see is such a rational delight in knowledge for its own sake and such liberal acquaintance with some of the sources of knowledge that every hour of leisure for these young people shall be an hour of pleasure." [128, 392.]

However high an ideal this may be it seems to place the whole emphasis of a liberal education on the enjoyment of leisure. Secondary education is not, it seems, to serve any purpose in carrying on the world's work, nor is one's work pursued that it may lead into and enrich one's leisure time. Knowledge for its own sake as an aim in education is an attempt to counteract the tendency of making the aim of education purely materialistic, and in this it is a worthy purpose, but instead of recognizing other purposes and consciously seeking to attain them it turns inward upon itself. This seems to be the case in the following quotation [117, 267]: "Some of those who are devoted workers in one or another field of science, and believe, as we do, that the natural sciences should hold a leading place in education, consider that to base the advocacy of this revolution on the facts of national success in the struggle for industrial and commercial supremacy and adequate national defense in war depends upon knowledge and skilful use of the discoveries of science is undesirable. They desire to see knowledge and the discovery of truth pursued for their own sake. They rightly hold that the highest efforts of the human mind in

this direction are and must be independent of the incentives and demands of material conflict, whether commercial or military; that science should be pursued for the love of science as art for art's sake; and that only so can science escape misdirection and proceed to higher and more glorious development."

The trouble here is that it rules out of consideration other purposes however high and noble they may be, and if knowledge is not to serve man, the inevitable outcome is that sooner or later subjects will be taught because it is considered a duty that we study them. They will become the ends and we the means. [Cf. E. C. Moore, *School and Society*, October 27, 1917.] "Art for art's sake" and "knowledge for the sake of knowledge" are forms of idolatry, pure and simple, just as much so as "money for money's sake" is a form of idolatry, and if adopted as aims they will exact their hecatombs of human sacrifices as in the past. They may be higher aims than "money for money's sake" but they are idols just the same. [134, 754–55.]

In the United States it is frankly stated that secondary education should serve purposes and that art and knowledge, like the Sabbath, were made for man, not he for them. We do not owe it to any subject to give it attention. There is no danger that vocational education will crowd out the humanities as was stated in Chapter IV, but man is inherently built for action and growth. Growth in what? In the perception of meanings, and as Dewey says [56, 145], "There is perhaps no better definition of culture than that it is the capacity for constantly expanding in range and accuracy one's perception of meanings." This will be the ideal in the new conception of culture. The instinct of curiosity will force the individual to keep prying into the meanings of things, and this means growth, and the more this prying into meanings is of a nature that it leads to still further prying the greater the growth. Growth is the only legitimate criterion, not knowledge for its own sake or knowledge that will not lead to further growth.

It is probably true that those who speak of knowledge for its own sake really have some further desire in mind. It is inconceivable to think that we are to have no purpose in mind other than just to know. Why should one know just to know? Lankester, for instance, [117, 197] says: "There is a contempt for knowledge for its own sake and arising out of that there is infinite waste, there is planlessness, there is a habit of 'muddling

through' which has at last brought us extraordinarily near to a crisis when it looks as though we should hardly muddle through at all." Knowledge for its own sake then is to "prevent infinite waste," is to take the place of "planlessness" and of "muddling through." It seems that after all knowledge is to serve purposes other than for its own sake. This seems to be a rather large program for knowledge to perform if it is to be pursued only for its own sake. It is just at this point that American educators part company with tradition. A subject is to be pursued because it serves real purposes but these purposes must be as broad as life itself. It is probable that after all there is not so much difference in the two opinions as at first seems possible. The American educators wish to be exact in their procedure just as medicine and other professions are exact. They are pragmatic to the core. It is hard to see how men of high scientific ability can fail to realize that knowledge for its own sake is unscientific and purposeless. Growth and "activity leading to further activity" are much more purposeful and much more accurately stated.

English educators think that "there is a danger at the present time that we are about to be plunged into great efforts for educational development resting on purely utilitarian motives. Such efforts may succeed for a time, but in the long run they are doomed to failure for they take their stand upon a lie. Beauty, truth, and goodness cannot in the end of the day be sought for anything beyond themselves." [198, 582.] They do not want their fate to be decided simply by the money test and it is just such a feeling that causes so much controversy when it is stated that education should be purposeful, should meet real needs. There is always a fear that this is plunging us straight into materialism but this fear is usually alleviated by stating that purposes of a higher type are intended. Some people seem to think that if an educational unit serves a purpose it is therefore reduced to a low and materialistic basis, but if there is no purpose beyond itself it is therefore worthy of highest consideration.

From the Standpoint of the Individual Growth Should Be the Aim of Education

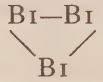
Just as growth of civilization, world building, is the main aim of education when viewed from the social standpoint so growth of the pupil is the main aim when viewed from the standpoint of the

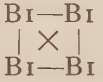
individual, but both the individual and society finds its own best expression in the fulfilment of the other. One of the most interesting and perhaps the best expression of what modern educators are considering as a possible solution to the unsettled conditions in educational philosophy is the conception of a continuously developing activity (leading on) as the aim of education. It is the principle advocated by Dewey as ever continuing growth and by Kilpatrick as "activity leading to further activity." This theory states that education is its own end, there being nothing to which education is subordinate save more education. That activity is desirable which leads to further activity and growth, and undesirable if the opposite is the case. "But if we start from the standpoint of the active powers of the children concerned," says Dewey [60, 63–4], "we shall measure the utility of new subject-matter and new modes of skill by the way in which they promote the growth of these powers. We shall not insist upon tangible material products, nor upon what is learned being put to further use at once in some visible way, nor even demand evidence that the children have become morally improved in some respect; save as the growth of powers is itself a moral gain."

This theory is built on the fundamental psychological fact of secondary neurone connections [199, 141] which is concerned with the connection of two primary neurone bonds. For instance, a child in investigating the objects around him, finds an electric button. The sight of the button becomes a "situation" for the "response" pushing. The bell rings and this becomes a "situation" for the "response" listening, turning in the direction whence comes the sound or by a general state of satisfaction. Suppose at first the child does not connect his push with the ring. The result so far will be two separate and distinct primary bonds. Suppose later, however, that he comes to see that his push is the cause of the ring, or in other words, he sees that the first bond is in relation to the second as cause to effect. He has made a secondary neurone connection, and the satisfaction that results is much greater than resulted from either of the primary bonds. To translate this into ordinary language, it signifies that the child has grasped a meaning.

Suppose now that the child has made three primary bonds. Call each B1. Then according to the figure there are three possible secondary neurone connections. If the number of primary

bonds be increased to four the number of possible secondary connections will be increased to six, and so on, according to the formula $\frac{n(n-1)}{1.2}$. As the number of bonds increases the possibility of a network of secondary connections becomes very complex. These secondary neurone connections are the psychological





counterpart of "growth," of ever increasing insight into meanings, of "activity leading to further activity."

This is, however, not the total possibility of secondary neurone connections. Suppose now that by the process just described a group of bonds have become interrelated with each other and at the same time another group has grown up as nearly as possible totally separated from the first. It sometimes happens that these groups as groups coalesce, or group one as a group becomes connected with group two as a group. The increase in the significance of each group is manifold. Sir Isaac Newton knew thoroughly the laws of falling bodies. Call this group one. He also knew the laws of planetary motions. Call this group two. By a stroke of genius he came to connect these groups and the meaningfulness of each was increased beyond description for himself, and the world even to the present day.

The making of many, many connections and interrelating them is just what is going on wherever a human mind is growing. Both primary and secondary connections are being made in an endless stream. The kind of activity that best lends itself to continuing growth is most desirable for school purposes. It is constantly expanding one's perception of meanings. The aim of education is to see to it that this forming of secondary connections takes place all the time, and not only in school but afterwards too. This is the aim of education but it is also education itself. Therefore, education is its own end, and is subordinate to nothing save to more education. The aim of education is thus seen not to be given in terms of vocation, or of particular kinds of subject matter, or "of art for art's sake," or in terms of external products which may be seen and counted, or offered for sale, but in terms of what takes place in the human nervous sytem. It is the dynamic conception of education.

It is realised that one kind of activity may do this for one person and some other for another. There are different patterns of consciousness which are appealed to differently. In the United States it is insisted that each child shall have that kind of education that best fosters his growth. A trade may produce more growth in one person than anything else while Latin or mathematics may be best for another.

This is exactly the reason why differentiated curriculums are the policy in the United States. It is thought that instruction should be adapted to the nature of the individual pupil or that particular pupil may not grow at all. But something of the same kind of philosophy explains the opposition to early specialisation in England. It is felt there that if a pupil pursues too narrow a line of work he soon exhausts the possibilities of growth in this line and goes to seed, a narrow specialist. The aims are the same but approached from different directions. It seems then that in this respect both England and the United States are right. England is right in not wanting the pupil to be taught in such a narrow line that growth cannot take place. The United States is right in insisting that the individual pupil shall be given that kind of instruction which will surely cause him to grow. England needs to retain her ideal of breadth, but at the same time to reach the individual child. The United States in reaching the individual child needs to remember that richness of experience is best conducive to growth.

At this point lies the chief danger which those face who have repudiated the doctrine of formal discipline and have accepted the doctrine of specific disciplines. In trying to educate by specific objectives they may be too specific; not too specific in the sense that they know what it is they want and the means of attaining it, but the objectives may be too narrow in scope. As a matter of fact those who oppose the doctrine of formal discipline have wished to correct just such a narrowness in practice. One of their principal contentions has been richness of content. They have always insisted that if one in studying Caesar, for instance, concentrates upon indirect discourse, he may learn indirect discourse, but if in addition to this, attention be directed to the geography of the country over which Caesar fought, perhaps in comparison with the campaigns of the recent war, the possibility of growth would be greatly enhanced. And if in addition to all this the

reasons why Caesar was in Gaul should be taken up with the class, thus forming the basis for all that section of Roman history of the first century B. C., the growth might eventually be worth the time spent upon this study. The chief trouble with this subject as with all other subjects of study has been that teachers have not been able to grasp their full possibilities for the pupil's growth.

The older subjects were superior in that the teachers knew more definitely what to require of the pupil, but unfortunately except in the hands of a very skillful teacher the bonds were primary bonds. Secondary neurone connections were few. Meaning was sacrificed to technique. President Hadley says on this point [83, 540], "And even with the men to whose intellectual temper the old curriculum was best suited it did little for real culture. The student's time was so taken up with the solution of the mathematical problems before him that he lost sight of the bearings of mathematics on modern science and modern affairs. He was so absorbed in the work of translating sentences of Latin and Greek, that he missed the value of the contents of the books themselves."

Growth, therefore, according to this theory does not take place when the pupil is narrowly trained in any one line, be it language, science, or vocation. It does not take place when the pupil crams fact after fact at the expense of meaning. These are the primary bonds. Meanings may be built from them as raw materials but not necessarily so, unless this is a definite concern of the teacher. Growth does take place when the whole environment of the child is used in order to supply motive and meaning to his work. [54, 252.] This is what Dewey has in mind in his whole educational philosophy as shown above. (Chapter IV.)

After the pupil has left school all too often he, as a worker, is cut off from the significance of what he is doing. He does his work mechanically with the money reward in mind, without any thought of its social significance. There are certain bonds necessary for the performance of his daily tasks. Let us say that this group of bonds is in perfect working order. There may be, and there will be if the worker is a healthy individual, a number of tentacles, or sprouts, figuratively speaking, reaching out from these bonds to connect with others. This is curiosity, a desire to know, a readiness of the bonds to act, but the worker may be situated in such a way that with every turn of the wheel his curiosity is dulled, the tentacles may be cropped as it were, prevented from connecting

with other bonds, and hence one's life becomes dull. He is not growing in the perception of meanings. His is not an activity that leads to further activity.

The Conception of Culture Examined in the Light of Activity Leading to Further Activity. The conception of activity leading to further activity as the fundamental aim in education gives a new standard by which to examine the conception of culture. This conception puts the whole emphasis not on what the pupil has studied but on the effect produced in him. It is the psychological conception of culture. If what one studies brings about growth it is cultural to that extent. The American ideal is first to meet the social and individual, the mental, moral, and physical needs of the child, and reformulate the definition of culture so that it will accord with the training thus received. In fact the term *cultivation* more nearly describes the American conception of culture. Eliot expresses this position very clearly [66, 355]: "The idea of a cultivated person, man or woman, has distinctly changed during the past thirty-five years. Cultivation a generation ago meant acquaintance with letters and the fine arts, and some knowledge of at least two languages and literatures, and of history. The term 'cultivation' is now much more inclusive. It includes elementary knowledge of the sciences, and it ranks high the subjects of history, government, and economics."

This idea is exactly in accord with activity leading to further activity. The different subjects may each contribute something toward culture. The amount would differ in degree, not in kind. Subjects would no longer be separated into cultural and non-cultural subjects. There would be no dualism between the culture of vocation and that of leisure for each would have a cultivating value. One of course might yield a greater return than the other.

Eliot [66, 361] says that "there was a time when the principal part of the work of universities was training scholarly young men for the service of the Church, the Bar, and the State; and all such young men needed, or were believed to need, an intimate knowledge of Greek and Latin; but now, and for more than a hundred years, universities are called on to train young men in public service in new democracies, for a new medical profession, and for finances, journalism, transportation, manufacturing, the new architecture, the building of vessels and railroads, and the direction of great public works which improve agriculture, conserve

the national resources, provide pure water supplies, and distribute light, heat and mechanical power." According to the more recent conception of culture those who have been adequately trained for the newer professions belong to the cultured class.

If the above conception of the meaning of culture be accepted, it can no longer be said that the purpose with which a person studies a subject will determine whether or not it will be cultural. Thus Cubberley says [47, 463], "What is vocational for one is liberal for another. The study of chemistry, for example, which is usually classified with the technical-vocational group, and is so for the future chemist or engineer, is broadly liberal when pursued by the classical student. The same is true of geology, biology, economics, or modern industrial history. Conversely, courses in literature, world history, economics, and the life and literature of Greece and Rome would be liberal studies to the technical or the scientific student."

It is plain that the basis for determining the cultural value of a subject here is the aim with which one pursues the subject. According to the conception of education as growth it depends upon the effect that a subject produces upon one, not upon the purpose with which one pursues the subject, as to whether it will be cultural. The amount of cultivation received, even if the pupil has in mind some specialized vocational calling, is the true standard. If his range of the perception of meanings is expanded it is cultural, otherwise not.

This is, however, a more advanced conception than the one that considers. since at some time or other, certain subjects have given fruitful results in developing children and culture has come to be linked with a pursuit of these subjects, that the definition of culture should be synonymous with the pursuit of them. The United States is not inconsiderate of culture, but is unwilling to accept a definition that is separated from the effect produced in pupils. Agriculture may for some pupils be more cultural than English literature even if they expect to make agriculture their vocation.

What is the meaning then of culture in a democracy that is primarily engaged in industry and commerce? What is the culture demanded by the new citizenship? It will certainly include training of the hand as well as of mind and character; labor as well as leisure, doing as well as knowing; intelligent participation

as well as intelligent comprehension. For this reason the primary purpose of the subjects that were formerly considered practical are now intended to be cultural. They are intended to develop an important side of one's personality. It is certain that the conception of culture will include more than in the past as the quotation from President Eliot shows. Dewey thinks [55, 216] that any scheme is sure to fail that leaves industry out of consideration. "In short, our culture must be consonant with realistic science and machine industry instead of a refuge from them. And while there is no guaranty that an education which uses science and employs the controlled processes of industry as a regular part of its equipment will succeed, there is every assurance that an educational system which sets science and industry in opposition to its ideal of culture will fail."

This merely expresses the aims of education as broad as life, that is, total social efficiency. "Liberal education aims to approach employment from the cultural side; vocational education plans to approach culture from the employment side. Both have the same ultimate objective in view; that is, total social efficiency. One holds that culture has been and will continue to be, based upon economic abundance; the other that prosperity should follow, rather than precede, culture as a determining factor of life. The vocationalist is likely to hold the culturist a dreamer; the culturist to accuse the vocationalist of being materialistic. One is accused of being impractical; the other of aiming too low." [180, 296.]

In accordance with these principles the conception of culture and of a liberal education is therefore changing in the United States. In England there has also been a considerable reformulation of culture. A tradition of three hundred years has been superseded, a tradition which tended to identify culture with a knowledge of the remote past. The English conception of a liberal education is no longer identical with a knowledge of ancient times but it tends to be bookish, as it is considered essential to a liberal education that one should have received instruction in the subjects mentioned in the last part of Chapter III [Cf. 111, 16]. Science and Modern Studies and even manual training, it will be noticed are included in the list. It seems, however, that this conception tends to put too much emphasis on knowledge about what has been said and done, and stresses too little the *doing* side of life.

It is, however, more acceptable than one which identifies culture almost exclusively with a knowledge of ancient times, since it may also include a knowledge of recent times. The danger of such a conception is that it may degenerate into a belief in art for art's sake, or knowledge for its own sake, but from the broad program for the reorganization of secondary education which England has adopted, it seems that this danger has, at least for the time being, been successfully avoided.

To prevent just such a situation is the reason why the Commission on the Reorganization of Secondary Education sets up objectives as the basis for reorganization rather than subject matter. By a comparison of the two pamphlets[1] from each of which extensive quotations have already been made one can gain an idea of the possible future educational development in the two countries. Each of these shows that there is a need for a clearer understanding of the meaning of secondary education in a democracy. There are, however, decided differences in their modes of attack. As was shown in Chapter III the basis of reorganization in England is that of the subjects of study, their place and function in the curriculum, while in the United States there is a new basis of organization, objectives and group differentiation.

This difference in approach to the reorganization of secondary education gives a basis for making some fundamental comparisons between the two systems. The English emphasize the humanistic-cultural studies; the Americans stress the social-civic and allied subjects. In other words England still defines secondary education as so much subject matter while in the United States intelligent citizenship is the controlling idea. At the same time England aims to secure a high grade of citizenship, and the United States that pupils may have a broad outlook on life. In England the classics have for centuries been the humanistic studies and England still puts high evaluation on the traditional and the past, but now in addition it is thought that the sciences, modern studies, and even craft culture may likewise be humane. The United States emphasizes the present and here all studies aim to secure socialization, as was shown in Chapter V. The danger in England

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[1] Sir F. G. Kenyon, *Education Scientific and Humane*, August, 1917, and *Cardinal Principles of Secondary Education*, Bulletin, 1918, No. 35, United States Bureau of Education.

is that secondary education may become bookish. The danger in the United States is that it may become narrowly vocational and technical. In England the aim is to train leaders, the brightest pupils being selected wherever they may be found for secondary education, as was shown in Chapter II. In the United States the aim is to develop the whole mass of the people with the expectation that leaders will emerge. The objectives which the United States sets out to achieve have already been given. There are likewise objectives which England seeks to attain. When the different committees met to discuss the content of secondary education in 1917 as reported by Kenyon they stated that the first object of secondary education is "to train human beings in mind and character as citizens of a free country." [110, 10.] In another place it is expressed as "a preparation for the whole of life." [110, 6.] In accordance with the last statement it has been agreed that "'humanistic' studies should be scientific, and 'scientific' studies humane." [110, 9.] Consequently, in the formulation of the curriculum both science and humanistic studies should have a place.

Conclusions

In preceding chapters it has been shown that there is a decided difference between the English and American attitudes toward vocational education in the secondary schools. The comparison of principles shows why. The United States considers the preparation for vocations an essential ally of the social-civic objective. When given early, England does not consider it a necessary part of the humanistic-cultural ideal. It is even antagonistic so it is thought. The aims of secondary education are, however, not very well defined in either country.

This lack of clearly conceived aims is the main point of difference between England and the United States, on the one hand, and Germany on the other. There was no such confusion in educational aims and purposes in Germany. The function of the school was definitely known. It was to be the servant of the aristocratic state in peace and war. In other words, there was a definite purpose and behind this purpose certain principles to be used as guideposts toward its attainment. Means were carefully adjusted to ends and towards the attainment of these ends every phase of educational administration, educational subject matter,

and educational method were mobilized. To organize all educational resources as efficiently for democracy as Germany did for autocracy is the fundamental problem for school men in England and the United States. For as true democracy is a much harder form of government to conduct successfully than an autocracy, so a system of education suited to a democracy requires a much wiser organization than a system suited to an autocracy. For in an autocracy it is sufficient that the masses be trained to make a living and to be governed; any other type than that would endanger the ruling classes. In a democracy on the other hand, full complete living as coworkers in an intelligent social order is the goal to be reached. It is, therefore, necessary for citizens of a democracy to learn to organize their educational forces efficiently or else liberty and democracy cannot endure.

BIBLIOGRAPHY

1. Allen, Carrie B. More Than Two Years of Latin. *Education*, 37: 440–4, March, 1917.
2. Adams, John. English Lay Critics on Education. *Educational Review*, 55: 377–387, May, 1918.
3. Anderson, E. G. School That Serves the Community. *Manual Training Magazine*, 19: 50–53, October, 1917.

3a. Aurner, C. R. *History of Education in Iowa*, Vol. III. Iowa City, 1914.

3b. Ayres, L. P. *Public Schools of Springfield*. New York, 1914.

4. Bagley, W. C., and Judd, C. H. Enlarging the American Elementary School. *School Review*, 26: 313–23, May, 1918.
5. Bagley, W. C. Education and Our Democracy. *School and Society*, 8: 241–5, August 31, 1918.
6. Bagley, W. C. *School and Home Education*. December, 1914.
7. Bagley, W. C. The Minimum Essentials Versus the Differentiated Course of Study in the Seventh and Eighth Grades, Joint Discussion. *Proc. N. E. A.*, 1916, 958–65.
8. Badley, J. H. *Education After the War*. Oxford, 1917.
9. Balliet, T. M. Vocational Education, Its Wider Implications. *Proc. N. E. A.*, 1915, 832–6.
10. Barber, F. D. Present Status and Real Meaning of General Science. *School Review*, 23: 9–24, January, 1915.
11. Barker, Ellis. How Education has Degraded the German Character. *Nineteenth Century*, 82: 552–70, September, 1917.

11a. Barr, F. E. The Practical Arts. *Proc. N. E. A.*, 1917, 392–395.

12. Bawden, W. T. Some Needed Developments in Vocational Education. *Manual Training Magazine*, 18: 273–8, March, 1917.
13. Bean, C. Homer. Psychological Factors in Vocational Education. *Educational Review*, 54: 148–63, September, 1917.
14. Benson, A. C. Education After the War. *Nineteenth Century*, 79: 1291–1306, June, 1916.
15. Benson, A. C. *Cambridge Essays on Education*. Cambridge, 1917.
16. Blaisdell, Thomas C. The Human Worth Curriculum. *School and Society*, 4: 176–178, July 29, 1916.
17. Bobbitt, J. F. *The Curriculum*. Boston, 1918.
18. Bonser, F. G. Democratizing Secondary Education by the Six-Three-Three Plan. *Educational Administration and Supervision*, 1: 567–576, November, 1915.
19. Bonser, F. G. Education for Life Work in Non-Professional Occupations. *The Annals of the American Academy of Political and Social Science*, 67: 64–76, September, 1916.
20. Bonser, F. G. Industrial Education in Present School Problems. *School and Society*, 4: 318–325, August, 1916.

21. Bonser, F. G. The Curriculum as a Means of Revealing Vocational Aptitudes. *Education*, 37: 145–159, November, 1916.
22. Boone, R. C. Social Phases of Vocational Education. *Proc. of N. E. A.* 1915, 837–841.
23. Booden, J. E. Education and Society. *School and Society*, October 19, 1918, 8: 451–461.
24. Boston, Mass. *A Study of Certain Phases of the Public School System of Boston*, 1916.
25. Bradford, Mary D. Necessity of Changes in the Upper Elementary Grades both in Subject Matter and Content. *Proc. N. E. A.* 1916, 407–11.
26. Brereton, Cloudesley. A Bird's Eye View of Educational Reform. *Nineteenth Century*, 81: 1300–12, June, 1917.
27. Brereton, Cloudesley. A Defense of the Modern Humanities. *Nineteenth Century*, 83: 810–23, April, 1918.
28. Brewer, J. M. Broader View of Vocational Guidance. *School and Society*, 5: 661–8, June 9, 1917.
29. Briggs, Thomas H. A National Program for Secondary Education. *School and Society*, March 16, 1918, pp. 301–307.
30. *British Medical Journal*, Modern Languages and "Modern Studies" in England. *School and Society*, 7: 708–710, June 15, 1918.
31. Bruce, J. Douglas. Recent Educational Tendencies. *School and Society*, 5: 241–51, March 3, 1917.
32. Bryce, Viscount. The Worth of Ancient Literature to the Modern World. *Fortnightly Review*, 101: 551–566, April 2, 1917.
33. Butler, N. M. Education After the War. *Educational Review*, 57: 64–79, January, 1919.
34. Butterworth, J. E. Evaluating of Methods for Providing Free High School Tuition. *School Review*, 23: 85–96, February, 1915.
35. Caldwell, Otis W. English View of Science Teaching. *School Review*, 24: 163–4, February, 1916.
36. Carter, R. Brudenell. Science and Education. *Fortnightly Review*, 100: 852–62, November, 1916.
37. Churchill, T. W. Making the High School Democratic. *School Review*, 24: 569–573, October, 1916.
38. Claxton, P. P. Organization of High Schools into Junior and Senior Sections. *Proc. N. E. A.*, 1916, 747–49.
39. Clutton-Brock, A. The Relation of Art to Science. *Educational Review*, 55: 73–76, June, 1917.
40. Coffman, L. D. The Minimum Essentials Versus the Differentiated Course of Study in the Seventh and Eighth Grades, Joint Discussion. *Proc. N. E. A.*, 1916, 953–58.
41. Cooley, E. G. Part-Time School. *School and Society*, 3: 843–47, June 10, 1917.
42. Commission on the Reorganization of Secondary Education. *Cardinal Principles of Secondary Education*, Bulletin, 1918, #35, United States Bureau of Education.
43. Committee on the Position of Modern Languages in the Educational System of Great Britain, Report.

44. Committee on the Position of Science in the Educational System of Great Britain, Report.
45. Crathorne, J. G. Required Mathematics. *School and Society*, July 7, 1917, 6: 6–17.
46. Cubberley, E. P. *Changing Conceptions of Education.* Houghton Mifflin Co. Boston, 1909.
47. Cubberley, E. P. Does the Present Trend Toward Vocational Education Threaten Liberal Education? *School Review*, 19: 454–465, September, 1911.
48. Cubberley, E. P. *The Portland Survey.* Yonkers-on-the-Hudson, 1915.
49. Cubberley, E. P. *School Organization and Administration, Salt Lake City Survey.* Yonkers-on-the-Hudson, 1916.
50. Darrah, David. Field Work as a New Educational Principle. *Educational Review*, 55: 20–29. January, 1918.
51. Dash, Beta. Clearing the Ground for Educational Reform. *School World*, December, 1916, 444–448.
52. Davidson, P. E. Educational Reform and the Manly Virtues. *School and Society*, 8: 361–7, September 28, 1918.
53. Davis, Calvin O. *High School Courses of Study.* Yonkers-on-the-Hudson, 1914.
54. Dewey, Evelyn, and Dewey, John. *Schools of Tomorrow.* New York, 1915.
55. Dewey, John. American Education and Culture. *New Republic*, July 1, 1916.
56. Dewey, John. *Democracy and Education.* New York, 1916.
57. Dewey, John. *School and Society.* Chicago, 1900.
58. Dewey, John. *Educational Situation.* Chicago, 1901.
59. Dewey, John. Learning to Earn: The Place of Vocational Education in a Comprehensive Scheme of Education. *School and Society*, 5: 331–35. March 24, 1917.
60. Dewey, John. *Interest and Effort in Education.* Boston, 1913.
61. Dillon, E. J. The World in Flux. *Fortnightly Review*, 105: 11–26, January, 1919.
62. Dodd, Alvin E. Vocational Education and Government Aid. *Proc. N. E. A.*, 1916, 479–83.
63. Drey, James. The New High School of Commerce, Boston. *Educational Review*, 51: 305–308, March, 1916.
64. Duckworth, Sir Dyce. The Duty and Discipline Movement. *Fortnightly Review*, 101: 332–5, February, 1917.
64a. Earhart, Lida B. *Teaching Children to Study.* Boston, 1909.
65. Eikenberry, W. L. Facts About the General Science Situation. *School Review*, 23: 181–91, March, 1915.
66. Eliot, C. W. The Case Against Compulsory Latin. *Atlantic Monthly*, 119: 352–61, March, 1917.
67. Eliot, C. W. *Changes Needed in Secondary Education.* New York, 1916.
68. English Board of Education. *Regulations for Secondary Schools.* 1918.

69. Elyria, Ohio. Educational Survey of. Bulletin, 1918, 15, United States Bureau of Education.
70. Ettinger, W. L. Life Career Motive in Education. *School and Society*, 8: 131–135, August 3, 1918.
71. Finney, R. L. Ultimate Aims of Education. *Educational Review*, 56: 305–24, November, 1918.
72. Finney, R. L. Sociological Principles Fundamental to Pedagogical Method. *Educational Review*, 55: 91–110, February, 1918.
73. Fisher, H. A. L. *Educational Estimates, House of Commons*, 1917.
74. Flexner, Abraham. Education and Mental Discipline. *Atlantic Monthly*, 119: 452–64, April, 1917.
75. Flexner, Abraham. *A Modern School*. New York, 1916.
76. *Fortnightly Review*. The Super-Parent and the Child. Statist, 100: 147–56, January 1, 1917.
77. Foster, W. T. Should Specialists Specialize? *Educational Review*, 53: 217–26, March, 1917.
78. Frayer, W. A. Elementary College Course in History. *Educational Review*, 53: 447–58.
79. Frodsam, Bishop. Public Economy and National Education. *Nineteenth Century*, 78: 948–56, October, 1915.
80. Gilchrist, E. P. Teaching Democracy. *School and Society*, 8: 379–80, September, 28, 1918.
80a. Goddard, H. N. Results Achieved in Secondary Agriculture and Methods Pursued in Actual Practice. *Proc. N. E. A.* 1917, 603–613.
81. Goodale, Grace. Classics and Cultural Education. *Educational Review*, 55: 245–65, March, 1917.
82. Gosling, T. W. Reconstruction After the War. *Educational Review*, 57: 376–387, May, 1919.
83. Hadley, Arthur T. College Studies and College Tests. *Harper's Magazine*, 137: 536–542, September, 1917.
84. Hadley, Arthur T. The Colleges and the Nation. *Harper's Magazine*, 139: 106–112, June, 1919.
85. Hall-Quest, Alfred L. Curriculum Thinking. *Educational Review*, 54: 109–117, September, 1917.
86. Hannan, Rev. Thomas. One of War's Warnings—"Take Care of the Child." *Nineteenth Century*, 78: 137–50, July, 1915.
87. Hill, D. S. Application of Research in Relating Industry to Education. *School and Society*, 8: 1–11, July 6, 1918.
88. Holmes, E. G. A. Ideals of Life and Education. *Nineteenth Century*, 78: 957–971.
89. Holmes, E. G. A. *Nemesis of Docility*. London, 1916.
90. Holmes, E. G. A. *In Defence of What Might Be*. New York, 1914.
91. Holmes, E. G. A. Discipline and Freedom. *Nineteenth Century*, 80: 88–100, July, 1916.
92. Holmes, E. G. A. Real Basis of Democracy. *Nineteenth Century*, 82: 301–25, August, 1917.
92a. Hook, Flora E. General Science in East Side High School. *School Science and Mathematics*, 16: 796–804.

93. Hopkins, E. M. College of the Future. *School and Society*, 6: 609–17, October 21, 1916.
94. Inglis, Alexander. *Principles of Secondary Education.* Boston, 1918.
95. Johnston, C. H., and Others. *High School Education.* New York, 1912.
96. Johnston, C. H., and Others. *The Modern High School.* New York, 1914.
97. Johnston, C. H. Curriculum Adjustments in Modern High Schools. *School Review*, 22: 577–90, November, 1914.
98. Johnston, H. H. The Public Service and Education. *Nineteenth Century*, 80: 101–128, July, 1916.
99. Judd, C. H. Industry and the Liberal Arts. *School and Society*, 8: 151–164.
100. Judd, C. H. *Measuring the Work of the Public Schools.* Cleveland, 1916.
100a. Judd, C. H. *Elementary School Journal*, Editorial, February, 1919.
101. Judd, C. H., and Bagley, W. C. Enlarging the American Elementary School. *School Review*, 26: 313–23, May, 1918.
102. Kandel, I. L. Review of *Principles of Secondary Education*, by Alexander Inglis. *School and Society*, August 31, 1918, 8: 261–64.
103. Kandel, I. L. Educational Progress in England. *Educational Review*, 56: 361–73, December, 1918.
104. Kandel, I. L. Review of *German and English Education, A Comparative Study*, by Fr. De Havre. *School and Society*, 7: 264, March 2, 1918.
105. Kandel, I. L. Political Theory and Education. *Teachers College Record*, May, 1916.
106. Kandel, I. L. Educational Tendencies in England. *School and Society*, 5: 631–9, June 2, 1917.
107. Kandel, I. L. England and Educational Reconstruction. *New Republic*, 15: 13–16, May 4, 1918.
108. Kandel, I. L. *Elementary Education in England.* New York, 1914.
109. Kandel, I. L. *Federal Aid for Vocational Education.* Report to the Carnegie Foundation for the Advancement of Learning. New York, 1917.
110. Kenyon, Sir F. G. *Education, Scientific and Humane.* London, 1917.
111. Kenyon, Sir F. G. *Education, Secondary and University.* London, 1919.
112. Kilpatrick, W. H. The Project Method. *Teachers College Record*, 19: 319–336, September, 1918.
113. Kilpatrick, W. H. Military School Methods. *New York Times*, December 1, 1918.
114. Kingsley, C. D. The Study of Nations—Its Possibilities as a Social Study in High Schools. *School and Society*, 3: 37–41, January 8, 1916.
115. Kreutzpointer, Paul. Smith-Hughes Act from a Layman's Standpoint. *School and Society*, July 27, 1918, 8: 102–105.
116. Lange, A. F. New Wine in New Bottles. *Manual Training Magazine*, 19: 9–12, September, 1917.
117. Lankester, Sir Ray. *Natural Science and the Classical System.* London.

118. Leavitt, F. M. The Content of the Course in Manual Arts. *Proc. North Central Association of Colleges and Secondary Schools*, 1912, p. 109.
119. Leighton, J. A. Democracy and Intellectual Distinction. *School and Society*, 5: 421–430, April 14, 1917.
120. Lodge, Gonzalez. The Value of the Classics in Training for Citizenship. *Teachers College Record*, March, 1917, 111–121.
120a. Lowell, A. L. Universities from Within. *World's Work*, October, 1919.
121. Lull, H. G. Social Core of the High School Curriculum. *School Review*, 26: 7–17, January, 1918.
122. Mackie, R. A. A Model High School Curriculum. *Educational Review*, 50: 36–42, June, 1916.
123. Magnus, Philip. Emerson's Thoughts on Education and Modern Problems. *Nineteenth Century*, 80: 1198–1211, December, 1916.
124. Magnus, Philip. Vocationalism. *Nineteenth Century*, 80: 526–537, March, 1914.
125. Magnus, Philip. Educational Ideals, The Way of Peace. *Nineteenth Century*, 81: 1331–9, June, 1917.
126. Marsh, J. F. Vocational Educational Policy. *School and Society*, 7: 592–3, May 18, 1918.
127. Marvin, C. H. Vocational Civics. *School and Society*, 5: 696–701, June, 16, 1917.
128. Mason, Charlotte. *Times Educational Supplement.* September 12, 1918.
129. Matheson, P. E. Education To-day and To-morrow. *Fortnightly Review*, 100: 614–21, October, 1916.
130. Meek, C. S. Developing a School System. *Proc. N. E. A.*, 1913, p. 172–8.
131. Meek, C. S. The Coördinating of Industrial Subjects with Traditional Subjects in the High School Curriculum. *School Review*, 22: 666–72, December, 1914.
132. Mill, John S. *Liberty.* Boston, 1863.
133. Monroe, Paul. *Principles of Secondayr Education.* New York, 1914.
134. Moore, E. C. Does the Study of Mathematics Train the Mind Specifically or Universally? A Reply to a Reply. *School and Society*, June 29, 1918, 7: 754–64.
135. Moore, E. C. Contemporary Ideals in Education. *Educational Review*, 52: 227–246.
136. Moore, E. C. The Doctrine of General Discipline. *Education*, 37: 312–24. January, 1917.
137. Moore, E. C. Our Undertaking and Why We Undertake It Now. *School and Society*, 7: 331–8, March 23, 1918.
138. Moore, E. C. Is the Stress Which is now Being Put upon the Practical Interfering with the Idealistic Training of Our Boys and Girls? *School and Society*, 5: 361–367, March 31, 1917.
138a. Moore, E. C. *What is Education?* Boston, 1915.
139. Moore, C. N. Disciplinary Values. *Educational Review*, 54: 245–55, October, 1917.

140. Neilson, W. A. Inaugural Address of the President of Smith College. *School and Society*, 8: 61–68, July 20, 1918.
141. Newlon, J. H. Need of a Scientific Curriculum Policy for Junior and Senior High Schools. *Educational Administration and Supervision*, 3: 253–69. May, 1917.
142. Nichols, Beverly. New York, *Evening Post*, March 20, 1919.
143. North Central Association, Proc. of, 1912–1914.
144. North Central Association, Proc. of, 1915–1916.
145. Noyes, William. Junior High School and Industrial Education. *Manual Training Magazine*, 19: 153–57, January, 1918.
146. Osborn, Henry Fairfield. Free Education Overdone. New York, *Times*, May 28, 1919.
147. Palmer, C. W. Is the Modern School a Return or a Departure? *School and Society*, 7: 500–2, April 27, 1918.
148. Patterson, Herbert. The High School Curriculum: A Statistical Study of Accredited Four Year High Schools in South Dakota. *School and Society*, December 28, 1918, 8: 776–780.
149. Payne, B. R. *Elementary School Curricula.* New York, 1905.
150. Pearse, Carroll G. Vocational Education and the Labor Problem. *Proc. N. E. A.*, 1915, 828–832.
150a. Peet, C. S. Results of an Investigation on the Present Status of Physiography. *School Science and Mathematics*, 16: 702–9.
151. Penrose, S. B. L. New Requirements for College Graduation. *Educational Review*, 54: 49: 53, June, 1917.
152. Perry, A. C. *Problems of the Elementary School.* New York, 1910.
153. Preston, C. E. Are Schools Hitting the Mark? *Educational Review*, 51: 275–85, March, 1916.
154. Pye, D. R. Science and the Public Schools. *Nineteenth Century*, 80: 101–112, July, 1916.
155. Rapeer, L. W. Core Curriculum for High Schools. *School and Society*, 5: 541–9, May 12, 1917.
156. Raymont, T. Liberal and Vocational Education. *School World*, September, 1916, p. 324–5.
157. Reeve, W. D. Unification of Mathematics in the High School. *School and Society*, 4: 203–12, August 5, 1916.
158. Resolutions of the American Federation of Labor. *Manual Training Magazine*, 18: 206.
159. R. L. L. Will it Teach Unblushing Materialism? *School Review*, 25: 285–7.
160. Roberts, R. D. *Education in the Nineteenth Century.* New York, 1901.
161. Roberts, Herbert F. Case of the American School. *School and Society*, 9: 369–73, March 29, 1919.
162. Robinson, C. E. Education in Our Public Schools. *Nineteenth Century*, 81: 1313–30, June, 1917.
163. Rosenstein, David. Society and Education, Standards in a Democracy at War. *School and Society*, 7: 421–7, and 459–65, April 13–20, 1918.

164. Russell, J. E. Education for Democracy. *Teachers College Record*, 19: 219–282, May, 1918.
165. Rynearson, Edward. Socialization of High Schools. *School Review*, 24: 692–700, November, 1916.
166. St. Paul, Minn., Survey Commission. Report of a Survey of the School System of St. Paul, Minn. St. Paul, 1917.
167. Sandiford, Peter. *Comparative Education*. London and Toronto, 1918.
168. Sandiford, Peter. *Training of Teachers in England and Wales*. New York, 1910.
169. San Francisco, Survey of. Bulletin 1917, #46, United States Bureau of Education.
170. Schorer, O. C. Commercial Training Under State Supervision. *School Review*, 24: 2–19, January, 1916.
171. *School Review*, 1914–1919. Chicago.
172. *School and Society*, 1914–1919. New York.
173. *School World*, 1914–1918. London.
174. Science, Position of in English Education. *School and Society*, 8: 175–76, August 10, 1918.
175. Siple, W. H. The Classicist or the Utilitarian. *School and Society*, 5: 608–12, May 26, 1917.
176. Smiley, C. N. Case of X Versus Dr. Eliot, Dr. Flexner et al. *Educational Review*, 54: 184–187, September, 1917.
177. Smith, Irving Wright. Future of Latin and Greek. *Education*, 37: 95–102, October, 1916.
178. Smith, H. B. *Establishing Industrial Schools*. Boston, 1916.
179. Smith, Payson. Limitations of State Control in Education. *School and Society*, 7: 391–4, April 6, 1918.
180. Smith, W. R. *Introduction to Educational Sociology*. Boston, 1917.
181. Snedden, David. Illusions of Prevocational Education. *School and Society*, 5: 511–15, May 5, 1917.
182. Snedden, David. The Minimum Essentials Versus the Differentiated Course of Study in the Seventh and Eighth Grades. *Proc. N. E. A.*, 1916, 965–976.
183. Snedden, David. *Problems of Secondary Education*. Boston, 1915.
184. Snedden, David. "Humanistic" Studies and Their Relation to Liberal Education. *School and Society*, August 10, 1918, 8: 171–175.
185. Snedden, David. History and Other Social Sciences in the Education of Youths Twelve to Eighteen Years of Age. *School and Society*, 5: 271–81, 5: 307–13, March 10–17, 1917.
186. Snedden, David. Liberal Education Without Latin. *School Review*, 26: 576–99, October, 1918.
187. Snedden, David. New Problems in Secondary Education. *School Review*, 24: 177–187, March, 1916.
188. Snedden, David. High Schools of Tomorrow. *School Review*, 25: 1–15, January, 1917.
189. Snedden, David. Vocational Education After the War. *School and Society*, 8: 751–8, December 28, 1918.

190. SPAULDING, F. E. Coöperation in School Administration. *School Review*, 26: 561–75, October, 1918.
191. STOWE, A. R. M. Thoughts on Training for Public Service. *School and Society*, January 27, 1917.
192. STRICKLAND, V. L. The War and Educational Problems. *School and Society*, 7: 394–404, April 6, 1918.
193. *School Review*, Confessions of Faith, Editorial. Vol. 24: 67, January, 1916.
194. *School Review*, Course in General Science for High Schools. Vol. 22: 407–9.
195. *School Review*, Two Years of Vocational Education, Editorial. Vol. 25: 364–5, May, 1918.
196. *School Review*. The Smith-Hughes Vocational Education Bill, Editorial. Vol. 25: 365–6, May, 1917.
197. *School Review*. The Smith-Hughes Bill Goes into Operation, Editorial. Vol. 25: 682, November, 1917.
198. TEMPLE, REV. WILLIAM. The Objects and Methods of Education. *School and Society*, 4: 571–585, October, 1916.
199. THORNDIKE, E. L. *Educational Psychology*, Volume I. New York, 1913.
200. THORNDIKE, E. L. *Educational Psychology*, Volume II. New York, 1913.
201. THORNDIKE, E. L. Education for Initiative and Originality. *Teachers College Record*, 17: 405–416, November, 1916.
202. TOBEY, J. A. Course in Human Engineering for Technical Schools. *Educational Review*, 54: 508–12, December, 1917.
203. *Times Educational Supplement*. London, January, 1914–July, 1919.
204. *Times*, New York. Princeton Changes Entrance Credits. March 19, 1919.
205. TOWNSEND, H. G. American Philosophy of Education. *School and Society*, 9: 373–6, March 29, 1919.
206. TWISS, G. R. Present Tendencies in Science Teaching. *School and Society*, 1: 436–41.
207. ULLMAN, B. L. Latin in Place of German. *School and Society*, 8: 337–341, September 21, 1918.
208. United States Commissioner of Education. Reports for 1916, 1917, and 1918.
209. VAN RIPER, B. W. On Radicalism in Education. *School and Society*, 5: 520–25, May 5, 1917.
210. WELD, L. G. Ideals of Industrial Education. *Manual Training*, 19: 269–75.
211. WELLS, DORA. The Lucy Flower Technical School. *School Review*, 22: 611–619, November, 1914.
212. WELLS, H. G. The Case Against the Classical Languages. *Fortnightly Review*, 101: 567–574, April 2, 1917.
213. WELLS, W. R. Humanistic Studies as Compensation for Lost Transcendental Values. *School and Society*, 8: 666–72, December 7, 1918.
214. WEST, A. F. Immortal Conflict. *School and Society*, 8: 31–35, July 13, 1918.

215. West, A. F. Our Educational Birthright. *School and Society*, 7: 61–6, January 19, 1918.
216. West, A. F. Our Birthright or a Mess of Pottage? *Educational Review*, 54: 433–8, December, 1917.
216a. West, A. F. *Value of the Classics.* Princeton, 1917.
217. Whitney, E. R. The Necessity for Common Factors in the Educational Basis of a Democracy. *School and Society*, 4: 309–13, August, 1916.
218. Woodhull, J. F. Science Teaching by Projects. *School Science and Mathematics*, 15: 225–232, March, 1915.
219. Workers' Education Association Yearbook, 1918.

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